

CITY OF DURBAN



Annual Report

OF THE

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDED 31st DECEMBER, 1973.



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ANNUAL REPORT : 1973

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NOTE: Figures for the previous year (1972) are shown in parenthesis throughout this Report unless otherwise indicated by the context.

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City Health Department,
9 Old Fort Place,
DURBAN,
4001.

August, 1975.

His Worship the Mayor and
Councillors of the City of Durban.

Mr. Mayor, Ladies and Gentlemen,

I have pleasure in presenting, in terms of Section 13 of the Public Health Act, as amended, the 71st Annual Report on the public health of Durban with which is combined an account of most of the activities of the City Health Department during the calendar year 1973.

Once again there has been a delay in issuing the Annual Report and this is occasioned by the serious staff shortages at all echelons in the Department.

No cases of formidable epidemic diseases occurred during the year although a very close watch was maintained on the situation in territories south of the Equator, as well as the rest of Africa. Cases of smallpox in Botswana, yellow fever in West Africa, cholera in North, East and West Africa and as near as Mozambique and Rhodesia occurred. Plague in Lesotho, Tanzania, Malagasy and Zaire also left little room for complacency, whilst an upsurge of yellow fever in South America was surprising.

Influenza was widespread throughout the world, both the attack rates and clinical severity of the illness ranging widely. Such was also the case in South Africa, Durban being relatively mildly affected.

With the exception of encephalitis and scarlet fever there were generally fewer notifications of infectious diseases in Durban. Diphtheria notifications dropped to a reasonably low figure of six, one less than last year (1972). Whether this situation can be maintained remains to be seen, as a low attack rate often leads to some complacency and this can be seen already by a slight fall off in the immunization figures for this

disease. None the less departmental efforts to maintain a high 'herd' immunity continued unabated. Poliomyelitis cases numbered only three but it is distressing to record that clinic immunization figures for this disease dropped considerably due to a shortage of the vaccine whilst field immunization had to be totally abandoned. Random sampling of blood for assay after immunization was undertaken with interesting results, as recorded under that particular section of this Report. The increased number of cases of encephalitis is not regarded as of any particular significance nor that of scarlet fever. In the latter instance all cases were mild.

It is indeed pleasing to note that tetanus notifications were the lowest since the disease was made notifiable in 1964. Natal, however, holds the dubious distinction of having a very high incidence of this disease compared with the other Provinces of the Republic, and Durban stands in the same position in regard to the other main centres in the Republic.

Twenty five cases of malaria, all of whom were infected without the Republic, were notified and with the ever present threat of an upsurge in the mosquito vectors here, particular vigilance was maintained over these cases. Typhoid fever, although lower in incidence than last year, continues in sufficiently high numbers to be of such concern that each and every case is meticulously questioned and in all respects extremely thoroughly investigated. The downward trend in notifications of pulmonary tuberculosis is still apparent although it remains the obvious major non-environmental problem facing the City. Undoubtedly the ever-improving socio-economic standards of the African, Indian and Coloured communities play a major part in the reduction of the attack rate although the department's curative and preventive measures have remained highly intensive.

The main cause of death amongst the White, Coloured and Indian communities continued, as expected, to be found in the diseases of the circulatory system. Diseases of the respiratory system, excluding pulmonary tuberculosis, constituted the third major cause of death amongst the Whites, but was second in all other communities. Infant mortality rates, one of the main indicators of the efficacy of a preventive health service showed a drop, especially in the African community where last year there were 77,39 deaths under the age of one year per 1 000 live births and this year 48,86 per 1 000 live births. Although this figure is still very high, 10 years ago it was 108,63.

Family health services continued to enjoy much public support, both in the clinics and the homes. The concept of a health service making life more worthwhile, rather than just longer, continued to gain a firm foundation as the community nurse of today concerns herself with problems ranging from infant feeding to geriatrics, physical and mental disabilities, to health education and family planning, with all the interrelated problems of each of these and many more. Family planning programmes, per se, were intensified and the filling of a full-time post of a Clinical Medical Officer solely for this purpose should boost this service greatly. It is to be hoped that the family planning service, a powerful weapon in the armamentarium of public health, will continue to hold the support and confidence of the authorities and public, for its overall effects will not be apparent for a goodly number of years to come, although at family level the improvement in the quality of life will rapidly be evidenced.

The City Council's scheme for the early detection of cervical uterine cancer continued to enjoy widespread favour.

Deaths from malnutrition, including kwashiorkor, under five years of age, amounted to 12 and with the State Subsidised Skim Milk Powder Scheme and other sources of dietary assistance there is no need for any such deaths in this City. The figure, however, has steadily fallen over the years, being 86 in 1964.

The use of measles vaccine, the cost of which is borne fully by the City Council was expanded considerably. Rubella vaccine, again the cost of which is borne by the City Council, was administered to girls in high schools. Other immunization services, except where vaccine shortages held up programmes, were well patronised. Health education is regarded as a duty of all members of the staff and although there is a special section devoted to mass education and the spearheading of especial programmes, the individual Community Nurse and Health Inspector contributed their fair share in this sphere.

The establishment of a post of Community Liaison Officer in this Department represented a farsighted step by the City Council and I hope that this will further the ideal of increasing the quality of life in all our communities and allow each section to draw upon its hitherto untapped or unco-ordinated resources.

The shortage of health inspectors continued and although the Department embarked some years ago on a scheme to train its own health inspectors, the majority leave after qualifying for positions elsewhere offering more attractive salaries and/or fringe benefits. In an attempt to improve a situation where the public health of the City was at risk, certain posts were created for "unqualified" personnel who had some knowledge or could be trained to relieve the Health Inspectors of as much minor routine work as possible. This step was made even more necessary by the delegation by the Minister to the City Council, to enforce the full terms of the Foodstuffs, Cosmetics and Disinfectants Act No.54 of 1972, within its area of jurisdiction, so calling further on the services of the qualified man.

The labour force was increased, primarily for anti-malarial work. A labour strike took place during the year but only in one instance did this department's labour force stop work completely and this was considered to be due to intimidation. There was a slight increase in the number of inspections carried out for environmental health purposes and these ranged from food handling concerns, flats and apartments to offensive trades, and from laundries to animal keeping and nuisances on vacant land. However, the number of inspections fell very far short of what is really essential bearing in mind that more inspections were done in 1969 (200 195 as against 216 879) which even then showed a drop against the previous year. This, despite the phenomenal growth of the City. That the department received less complaints than in 1969 and that the general environmental hygiene and standard of inspectional work remained high is certain evidence of the dedication which the staff have towards their work.

A fire almost reduced the Indian Market, a tourist but grossly unhygienic landmark, to ashes early in the year. A temporary replacement is to be built but in the course of the year illegal trading flourished in the vicinity. This, however, was but an aggravation of an existing situation in a number of localities in the City which defies attempts at abatement even with the ready co-operation of the South African Police.

The unsatisfactory conditions due to structural inadequacies at some of the beach front restaurants, reported on fully in 1967, continued to be an affront to the public health and no doubt an inconvenience to visitors as several of the other unsatisfactory restaurants which were demolished have yet to be replaced. Some improvement was apparent in the facilities for the Indian community but the situation in regard to the African community remained unresolved.

The most significant trend in regard to Durban's milk supply has been the consolidation of production. Over the last 10 years the number of producers has decreased by 22% to 474 while the volume of fresh milk received has increased by no less than 77% to a mean daily intake of 301 144 litres. The entire fresh milk supply is heat treated. It is of note that only 65% of the output of three "bottling" plants is concerned with the City, the rest being sold in neighbouring areas and to shipping.

The standard of the City's milk and milk products remained high due to the controls exercised by this Department, the factories and the general level of co-operation given by the dairy farmers themselves. The ever increasing use of machine milking and the installation of refrigerated bulk storage tanks on the farms continued to be encouraged.

Amendment of the building bylaws to allow for relaxation of certain standards of natural lighting and ventilation were made to meet the modern trends in airconditioning and lighting. The Department continued its membership of a standing building bylaws committee representing the Natal Institute of Architects, the Master Builders Association, the National Building Research Institute and interested Municipal departments. This liaison is considered invaluable.

Pest control remained at a high standard but no particularly unusual features were recorded; none the less mention is made that much work continued in the control of *A. funestus* in the northern areas of the City as it is considered that any relaxation in this sphere of activity could very easily threaten the City's long standing malaria free situation. Biological control of culicine mosquitoes, where possible, continued to prove its worth both from economic and practical viewpoints. Rodent control measures were increased but

although the position was contained, staff shortages and quantities of food waste, as attractive as any bait, indiscriminately discarded by the public, hampered the ongoing campaign.

Water metering reached 76% of the planned programme but unfortunately no reduction of water ponding on private premises nor reduction in the amount carried by the street drainage systems was apparent. The chemical and bacteriological standards of the water supplied to the public by the City Council remained above criticism. In so far as refuse collection was concerned the increased use of disposable plastic bags in various areas was a significant public health advance and it is to be hoped that the short supply and increased cost of the raw materials will not hinder the programme. The lack of reasonably situated facilities for the public to dump garden refuse, junk and like materials remained unresolved, a state of affairs that can only lead to an increase in illegal dumping.

Progress on sewerage reticulation of the City continued, but by no means as rapidly as could be wished, 120 000 pails still being serviced.

The extremely high quality of the sea water at Durban's bathing beaches remained unchanged as demonstrated by the monitoring programme conducted in conjunction with the Council for Scientific and Industrial Research.

Slum clearance was kept at a pace commensurate with the availability of housing and therefore never approached desirable levels. Any attempt to accelerate the programme could only aggravate the problem of illegal shack construction which was only just contained within the City and barely held back in the environs.

Housing for the middle and lower income brackets of the White community remained unmet. The position in regard to the Coloured people was extremely critical. However, progress in this sector appears to have relatively good prospects although obviously the requirements will not be met for several years to come. Housing for the Indian community will be a problem for the foreseeable future despite the progress already made and the planned

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programme for the huge housing schemes at Phoenix and Newlands. In these areas installation of water and sewer reticulation is well under way, as well as certain major and minor roadworks. African housing within the City was confined to hostels in the south of the City. However, the City Council, acting as agent for the South African Bantu Trust was active both to the north and south of the City but as was the case last year at a restricted tempo due to the general financial situation.

To His Worship the Mayor and City Councillors my thanks are due for their interest in matters of public health, whilst particular thanks are expressed to the Chairman and Members of the Health and Housing Committee not only for their encouragement but also their active support.

The co-operation afforded myself and my staff by the Heads and Members of other Departments is indeed appreciated whilst the consideration given to staff matters by the Municipal Service Commission is acknowledged.

To the South African Broadcasting Corporation and the press I must once again reiterate my grateful appreciation. Their interest and ready co-operation in drawing the attention of the citizens of Durban to matters of importance and concern in public health served as an invaluable link between my Department and the public.

Lastly, but by no means least, a special tribute is paid to every member of the staff for their continued loyalty, team spirit and the very high standard of work they maintained throughout the year despite the added burdens due to staff shortages.

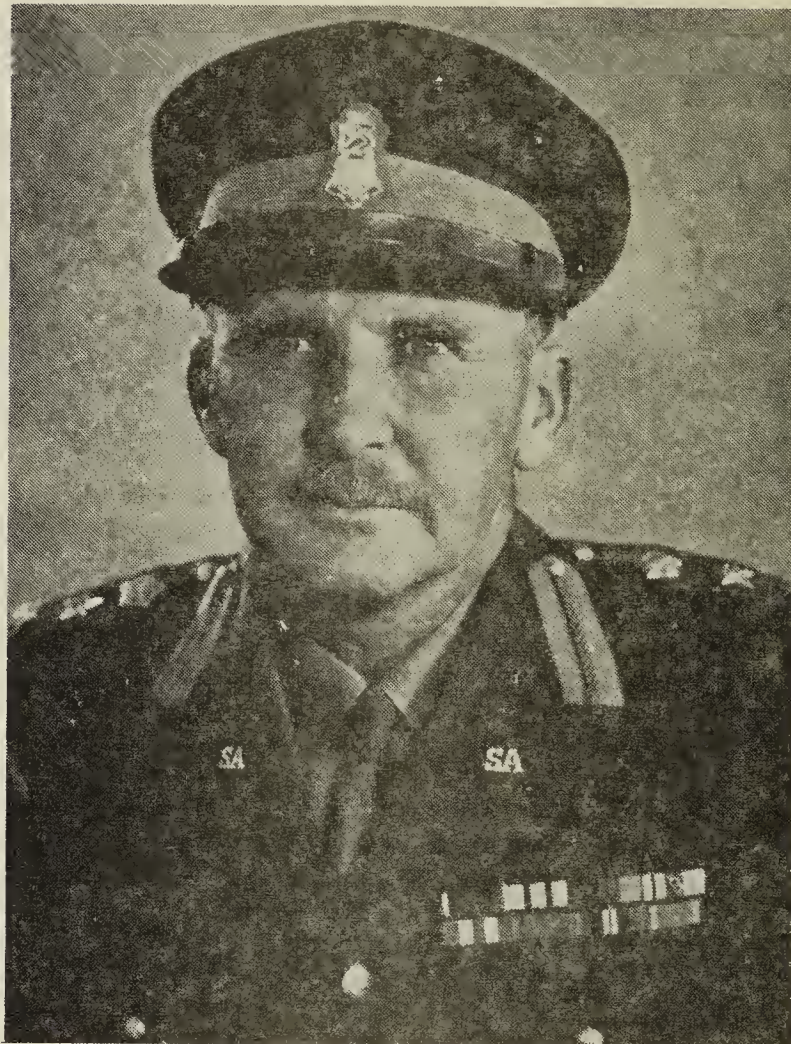
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 C.R. Maskenzie
 M.B.; B.Ch.; D.T.M. & H. (Rand);
 F.R.S.H.; F.I.P.H.; Honorary
 Senior Lecturer in Public Health
 Administration, University of Natal.
CITY MEDICAL OFFICER OF HEALTH

IN MEMORIAM

GRAHAM HILTON-BARBER

M.B.; CH.B.; D.P.H.; UNIV.CAPE TOWN



Honor virtutis praemium

The passing to higher service of my beloved friend and colleague, Graham Hilton-Barber, in April 1973 was a grievous loss not only to myself but to all my staff who held him in singularly high esteem. His encouragement, kindness and integrity commanded their respect and affection.

In 1960 Dr. Hilton-Barber, after a distinguished military career in World War II and having attained the rank of Deputy Surgeon General, retired from the South African Defence Force and joined the City Health Department where in 1963 he became Deputy City Medical Officer of Health. His transition from military to civilian life was accomplished with amazing adaptability, almost overnight, and he became an invaluable asset to me with his extensive clinical and preventive health experience, which benefitted not only my Department but all the citizens of this fair City. Durban is the poorer for his loss.

"There was a man."

I. HISTORICAL AND GEOGRAPHICAL

(a) Historical

Durban, on the eastern seaboard of southern Africa, can lay claim to being one of the loveliest maritime cities in the world, yet it is little more than 140 years since the first pioneers arrived to open up the Port of Natal. Where once there was nothing but swamps and dense bush and elephant and other animals abounded, one of the foremost commercial and industrial centres on the African sub-continent has developed.

Although Durban gained borough status in 1854, some 19 years after the settlers decided to lay out the settlement in streets and named the town D'Urban after Sir Benjamin D'Urban, the then Governor of the Cape Colony, it was not until some 20 years later that the Health Department came into being to deal with problems relating to drainage, animal slaughter, sanitation and diseases. It was in 1874 that Durban's first Medical Officer of Health, Dr. Julius Schulz was appointed.

Until 1932, the municipal area comprised 13 square miles (3 372 ha) which during that year was enlarged to some 70 square miles (18 160 ha) when populous suburbs around its boundaries were incorporated. This raised the population from 125 100 to 215 661. By 1935 Durban was the third most densely populated town in South Africa and in that year the status of Durban was raised to that of a city.

Durban has profited greatly from its energetic approach to promotive and preventive medicine and today possesses a well balanced environmental and personal health service. The residents and visitors, the latter approaching half a million every year, can enjoy life in this City with confidence in the standards of public health. This is in direct contrast to the sufferings experienced in the earlier part of the century from malaria, typhoid, dysentery, enteritis and even plague, the latter being introduced during the Anglo-Boer War from the East and South America.

Throughout its history the health department has been continually re-orientated to ensure the best health protection. Specialised sections of the department have been created for this purpose, particularly as the

scope of public health is ever widening and the preventive and promotive functions in safeguarding the health of Durban's inhabitants are being continually challenged.

(b) Geography

The City is situated on the south eastern seaboard of the African continent, at longitude 31° east and 29° south. This fortuitous geographical position has contributed to Durban's status as one of the finest general ports in the southern hemisphere, whilst the ideal year-round climate continues to attract tourists to this premier holiday resort of South Africa.

Details of temperatures and other meteorological data are set out in the accompanying table.

(c) General Layout

The main commercial development has taken place due north of the natural harbour sheltered by the Bluff, which has in turn developed residential characteristics with fine sea and inland views. The main industrial areas are located south west of the harbour, and access thereto is well catered for by road and rail services. The foreshore extending along the golden beaches is supported by various amenities such as hotels, restaurants, amusement parks, playing fields, cinemas and holiday flats. The other residential areas are located on the Berea and north of the Umgeni River, and these are interspersed with suburban shopping complexes and associated recreational facilities.

(d) Municipal Data

Area : 26 757 hectares

During the year 32 hectares were incorporated into the borough, but no areas were excised during this period.

<u>Valuation</u>	<u>Land</u>			<u>Buildings</u>		
Old Borough and added areas (excluding Welbedagt, Buffels Bosch, Newlands and kwaMashu)	R768	983	260	R790	492	640
	(R766	727	820)	(R748	149	140)
Buffels Bosch	R	82	590	R	14	870
	(R	88	680)	(R	17	060)
Newlands	R	2	953 110	R	722	580
	(R	2	906 870)	(R	761	860)
Welbedagt	R	762	040	R	169	990
	(R	762	040)	(R	169	990)

METEOROLOGICAL DATA

1973	24 Hours Shade Temperature (0°C)			Relative Humidity			Barometer Readings (Millibars)			Rainfall			Sun-light
	Max.	Min.	Mean	Max.	Min.	Ave.	Max.	Min.	Mean	mm	No. of days on which rain fell	High-est fall (mm)	
January	31, 6	16, 3	23, 3	100	54	79	1024, 0	1000, 9	1012, 7	132, 4	19	31, 9	5, 31
February	32, 3	16, 0	23, 6	98	45	79	1026, 9	1001, 7	1014, 2	34, 8	10	8, 9	6, 14
March	32, 3	17, 0	24, 3	100	45	81	1028, 8	1003, 0	1014, 7	58, 8	15	15, 8	5, 57
April	28, 0	11, 8	20, 6	100	39	79	1030, 4	1006, 0	1019, 6	46, 9	9	36, 0	6, 86
May	28, 1	5, 9	18, 3	100	29	72	1027, 2	1003, 4	1018, 2	16, 6	8	7, 5	6, 85
June	30, 2	4, 2	16, 9	100	17	71	1034, 9	1012, 4	1023, 4	2, 3	2	1, 9	7, 80
July	29, 4	5, 2	16, 2	100	16	70	1033, 9	1007, 8	1022, 5	14, 7	5	10, 2	7, 87
August	26, 7	6, 4	16, 3	100	29	76	1033, 9	1004, 1	1021, 3	120, 9	8	48, 4	7, 85
September	29, 9	9, 9	18, 0	100	36	76	1028, 5	1003, 9	1017, 9	118, 9	13	32, 6	4, 55
October	28, 7	11, 6	20, 0	100	35	78	1031, 0	1000, 8	1016, 4	87, 3	14	50, 1	6, 75
November	33, 5	10, 3	20, 9	100	27	79	1025, 9	1000, 5	1015, 2	121, 3	17	23, 3	6, 21
December	30, 3	15, 0	22, 2	100	47	78	1028, 5	1002, 8	1014, 8	67, 4	15	27, 6	6, 62
Total for the year:													6, 57 Daily average for yr.
							822, 3			135			

Rates: (including water rate - figures quoted are
Cents in the Rand)

	<u>Land</u>	<u>Buildings</u>
(a) Code 1 (Residential property, dwellings, maisonettes, etc.)	1,86 cents (1,73 cents)	1,86 cents (1,73 cents)
(b) Code 2 (Residential property, flats, boarding houses, private hotels etc.)		
(c) Code 3 (Other than residential property)	3,90 cents (3,54 cents)	0,65 cents (0,54 cents)

The rates on land and buildings in the Buffels Bosch area are assessed at 60% of the General Rate plus the Water Rate.

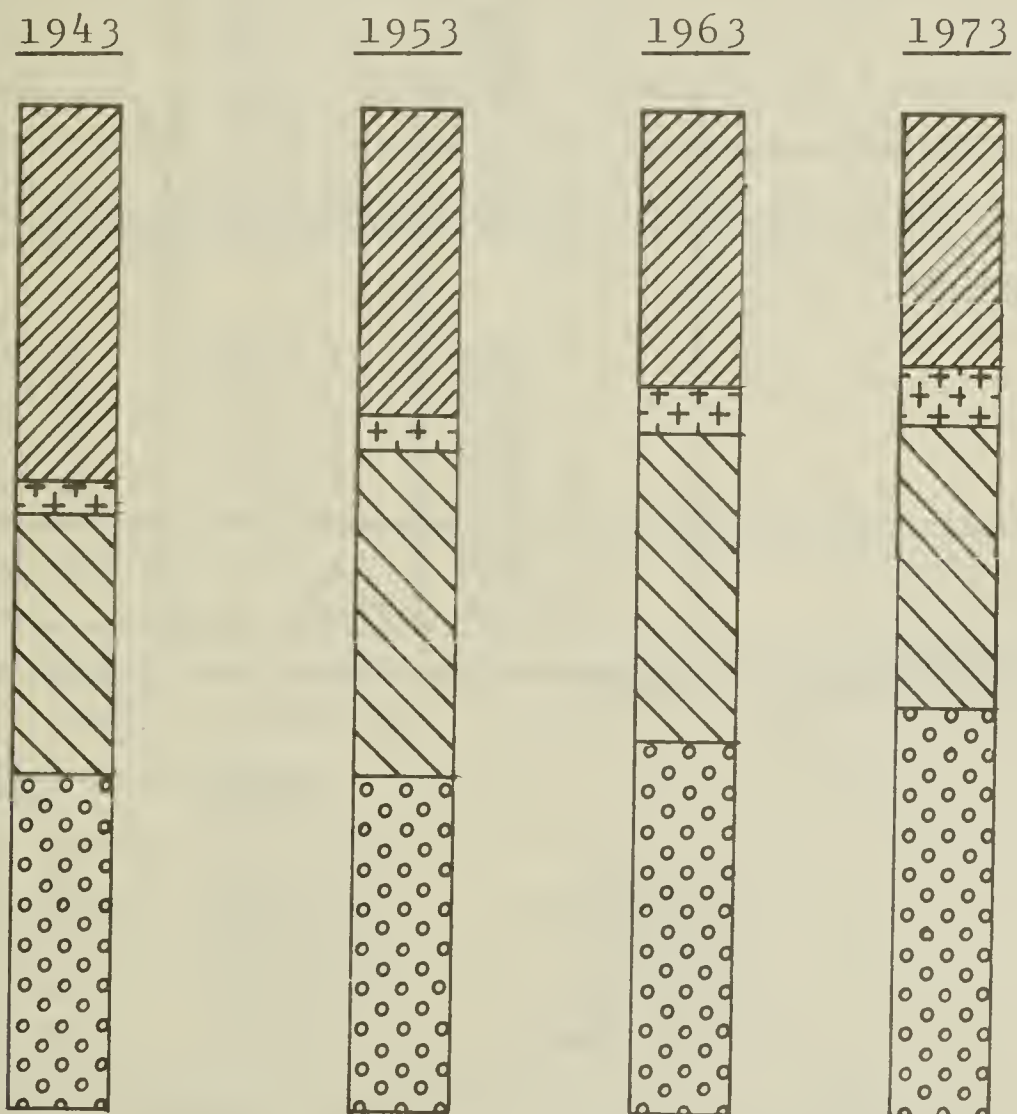
There are no rateable valuations for the kwa-Mashu Bantu Housing area, as in terms of Ordinance 5 of 1958, the Council may not levy rates on properties in this area without the prior approval of the Administrator of Natal.

II. VITAL STATISTICS

Population (Estimated)

White	200 719	(25,40%)
Coloured	46 943	(5,95%)
Bantu	220 921	(27,95%)
Indian	321 693	(40,70%)
	790 276	(100,00%)

The following diagrams illustrate the gradually changing percentage composition of the community:-



Legend:

White	
Coloured	
Bantu	
Indian	

1973 Births

Race	Male	Female	Total	1972
<u>Legitimate:</u>				
White	1 575	1 520	3 095	3 245
Coloured	588	522	1 110	1 187
Bantu	2 014	1 826	3 840	4 185
Indian	4 557	4 473	9 030	8 962
Total	8 734	8 341	17 075	17 579
<u>Illegitimate:</u>				
White	106	108	214	165
Coloured	269	255	524	487
Bantu	2 745	2 761	5 506	5 554
Indian	245	197	442	487
Total	3 365	3 321	6 686	6 693
<u>Total Births:</u>				
White	1 681	1 628	3 309	3 410
Coloured	857	777	1 634	1 674
Bantu	4 759	4 587	9 346	9 739
Indian	4 802	4 670	9 472	9 449
Total	12 099	11 662	23 761	24 272

Crude Birth Rates: (Number of births per 1 000 population)

	<u>1973</u>	<u>1972</u>
White	16,48	17,28
Coloured	34,80	36,79
Bantu	42,30	45,31
Indian	29,44	30,19
All races	30,06	31,49

Crude birth rates for each sector of the community exhibited a slight decline.

Illegitimate Births: (as a percentage of total births)

	<u>1973</u>	<u>1972</u>
White	6,46%	4,84%
Coloured	32,06%	29,09%
Bantu	58,12%	57,03%
Indian	4,66%	5,15%
All races	28,14%	27,58%

All race groups, with the exception of the Indian community, reflected an increase in the percentage of illegitimate births when compared with the previous year.

Stillbirths

Community	Number		Rate per 1 000 live births	
	1973	1972	1973	1972
White	28	24	8,53	7,09
Coloured	18	21	11,13	12,70
Bantu	281	280	30,99	29,60
Indian	144	147	15,43	15,80
All races	471	472	20,22	19,83

The position remains relatively unchanged from that of the previous year.

Deaths

Race	Total Deaths				Crude death rate per 1000 population	
	Male	Female	Total	1972	1973	1972
White	1 027	900	1 927	1 942	9,60	9,84
Coloured	203	129	332	308	7,07	6,77
Bantu	1 076	795	1 871	2 050	8,47	9,54
Indian	1 220	917	2 137	1 946	6,64	6,22
All races	3 526	2 741	6 267	6 246	7,91	8,10

The accuracy of the death statistics regarding the Bantu community is doubted, as it is probable that certain deaths for this race group have not been recorded. Should this be the case it would have the effect of likewise reducing the overall crude death rate.

The three main causes of death for the different communities were as follows:-

Cause of Death	No.	Percentage of total deaths
<u>White:</u>		
(a) Diseases of the circulatory system	896(898)	46,50 (46,24)
(b) Neoplasms	351(313)	18,22 (16,12)
(c) Diseases of the respiratory system (excluding pulmonary tuberculosis)	221(212)	11,47 (10,92)
<u>Coloured:</u>		
(a) Diseases of the circulatory system	72(69)	21,69 (22,40)
(b) Diseases of the respiratory system (excluding pulmonary tuberculosis)	40(41)	12,05 (13,31)
(c) Neoplasms	39(27)	11,45 (8,77)
<u>Bantu:</u>		
(a) Infective and parasitic diseases	215(212)	11,49 (10,34)
(b) Diseases of the respiratory system (excluding pulmonary tuberculosis)	182(218)	9,73 (10,63)
(c) Diseases of the circulatory system	133(172)	7,11 (8,39)
<u>Indian:</u>		
(a) Diseases of the circulatory system	734(588)	34,35 (30,22)
(b) Diseases of the respiratory system (excluding pulmonary tuberculosis)	206(239)	9,63 (12,28)
(c) Infective and parasitic diseases	111(133)	5,19 (6,84)
<u>All Races:</u>		
(a) Diseases of the circulatory system	1 835(1 727)	29,28 (27,65)
(b) Diseases of the respiratory system (excluding pulmonary tuberculosis)	649(710)	10,35 (11,37)
(c) Neoplasms	552(534)	8,80 (8,55)

AGE AT DEATH

The number of deaths at various ages, with the percentage of total deaths, is summarised in the following table :-

1973

RACE GROUPS		A G E														G R O U P S				Total	
		0 - 1		1 - 4		5 - 13		14		23		24 - 43		44 - 63		64 & over					
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
DEATHS	White	39	31	5	4	2	3	16	8			46	34	314	200	604	621	1026	901		
	Coloured	38	31	23	9	4	-	9	5			28	17	60	39	41	28	203	129		
	Bantu	371	353	112	109	13	17	25	28			185	98	272	110	97	81	1075	796		
	Indian	311	217	57	61	24	24	39	28			153	89	435	288	201	210	1220	917		
	Total Non-White	720	601	192	179	41	41	73	61			366	204	767	437	339	319	2498	1842		
Total of all races		759	632	197	183	43	44	89	69			412	238	1081	637	943	940	3524	2743		
PERCENTAGES	White	3,80	3,44	0,49	0,44	0,19	0,33	1,56	0,89			4,48	3,77	30,61	22,20	58,87	68,93	100	100		
	Coloured	18,72	24,03	11,33	6,98	1,97	-	4,43	3,88			13,79	13,18	29,56	30,23	20,20	21,70	100	100		
	Pantu	34,51	44,35	10,42	13,69	1,21	2,14	2,33	3,52			17,21	17,30	25,30	13,82	9,02	10,18	100	100		
	Indian	25,48	23,66	4,67	6,65	1,97	2,62	3,20	3,05			12,54	9,71	35,66	31,41	16,48	22,90	100	100		
	Total Non-White	28,83	32,63	7,69	9,72	1,64	2,23	2,92	3,31			14,65	11,07	30,70	23,72	13,57	17,32	100	100		
Total of all races		21,54	23,04	5,59	6,67	1,22	1,60	2,53	2,52			11,69	8,68	30,67	23,22	26,76	34,27	100	100		

Amongst the Non-Whites, 30,44 per cent (Coloured 20,78; Bantu 38,72; Indian 24,71) of all deaths occurred under the age of one year, as compared with 3,63 per cent in the White group.

Deaths under five years of age constituted 4,10 per cent of all deaths in Whites compared with 38,99 per cent in Non-Whites (Coloured 30,42; Bantu 50,51; Indian 30,23).

Deaths under 24 years of age constituted 5,60 per cent of all deaths in Whites compared with 7,01 per cent in the previous year, while amongst Non-Whites 43,96 per cent of all deaths occurred under 24 years of age, a decrease from the 44,89 per cent recorded in the previous year.

It is worthy of note that, amongst the Bantu, 945 deaths out of a total of 1 871, representing 50,5%, were attributed to "other ill-defined and unknown causes of morbidity and mortality." Obviously such a lack of sufficient detail on the death certificates does not permit accurate statistical analysis for this community.

There were 47 deaths from motor vehicle accidents, all of which were Bantu, compared to 31 deaths for the previous year (4 White, 25 Bantu and 2 Indian).

Infant Mortality: (Deaths under the age of one year and rate per 1 000 live births)

Race	No. of Deaths	Rate
White	42 (60)	12,80 (17,72)
Coloured	51 (64)	31,55 (38,72)
Bantu	443 (732)	48,86 (77,39)
Indian	384 (326)	41,16 (35,05)
All races	920 (1 182)	39,50 (49,66)

It is pleasing to note that the infant mortality rate has dropped in the aggregate, with the largest decrease being reflected in the Bantu community and in this latter case reasonable evidence of the part played by the health services of the City.

Maternal Deaths: (Deaths from causes related to childbirth and rate per 1 000 live births)

Race	No. of Deaths	Rate
White	1 (1)	0,30 (0,29)
Coloured	- (1)	- (0,60)
Bantu	- (1)	- (0,11)
Indian	6 (1)	0,64 (0,11)
All races	7 (4)	0,30 (0,17)

This situation is satisfactory.

III. COMMUNICABLE DISEASES

INTRODUCTION

No cases of formidable epidemic disease occurred during 1973. Where suspect cases of smallpox were reported, investigations excluded this diagnosis.

GLOBAL EPIDEMIOLOGY

Continual reference to the World Health Organization Weekly Epidemiological Bulletin was made to keep abreast of the prevalence of disease in neighbouring states as well as disease trends throughout the world.

(i) Smallpox

Detection of cases in Botswana in 1973 after a five month period of nil returns, emphasised the need for continuing active surveillance in areas believed to be free of the disease or in danger of importation of the disease from known endemic areas near their borders.

(ii) Yellow Fever

Cases of yellow fever were reported from the West African states of Ghana, Nigeria and the United Republic of Cameroon. The total notifications was eight, with five deaths. By comparison, the epidemiological trend in the New World during 1973 was cause for concern. The number of cases of yellow fever in South America showed a substantial increase over the 1972 figure.

With the high index of *Aedes aegypti* mosquitoes in Durban, the need for constant vigilance was emphasised.

(iii) Cholera

Cases of cholera were reported from various North, East, West and Central African states, and of particular concern to Durban were cases in Malawi, Angola, Mozambique and Rhodesia.

One imported case from Angola was reported in Johannesburg but there were no secondary cases.

(iv) Plague

Cases of plague were reported from Zaire, Tanzania, Malagasy and Lesotho.

(v) Influenza

Information correlated at the World Influenza Centre, London, showed that influenza was geographically widespread during 1973. Epidemiologically the manifestations were protean. The attack rates varied from low to moderate, the disease severity from clinically mild to moderately severe. In some areas there were only sporadic cases, compared with localised outbreaks or epidemics in other countries. Age groups affected ranged from infants to the aged. Although the causative virus varied, the most common isolates were A/England/42/72, A/Port Chalmers/1/73, and B/Hong Kong/5/72.

In South Africa, A/England/42/72 caused outbreaks in three mining areas of the Rand and Orange Free State, and in Cape Town.

A. NOTIFIABLE DISEASESNotifications

During 1973 there were fewer notifications of all notifiable diseases except scarlet fever, encephalitis and poliomyelitis.

The following table reflects, in community groups, the number of cases of disease notified, and the overall attack rate:

Disease	W	C	B	I	Total	Attack rate per 1 000 population
Diphtheria	1	-	3	2	6	0,0076
Encephalitis	5	2	10	11	28	0,0354
Erysipelas	2	-	-	-	2	0,0025
Gonococcal ophthalmia	2	-	-	-	2	0,0025
Leprosy	-	-	2	1	3	0,0038
Meningococcal meningitis	2	3	2	-	7	0,0089
Poliomyelitis	-	-	2	1	3	0,0038
Puerperal sepsis	-	-	11	2	13	0,0164
Scarlet Fever	37	1	-	-	38	0,0481
Tetanus	-	-	9	1	10	0,0127
Typhoid Fever	12	4	17	10	43	0,0544
Viral Hepatitis	59	15	29	93	196	0,2480
Brucellosis	1	-	-	-	1	0,0013

Brucellosis

There was a single notification of brucellosis, a White male aged 55 years. Although he had been on a hunting

trip in the Louwsburg area, during which time he ate locally slaughtered animals and on one occasion took raw milk in a cup of coffee, it seemed more likely that the disease had been contracted locally.

Diphtheria

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1954. Six cases were notified in 1973 which was one less than the 1972 figure of seven cases. Of these six cases, one was White, three were Africans and two were Indians. One death was recorded, an African child aged two years. Two of the cases were carriers and four were clinical cases. The immunization state of all these cases is depicted hereunder:-

Details	Four Clinical Cases	Two Carriers
3 doses of vaccine	2	2
2 doses of vaccine	-	-
1 dose of vaccine	-	-
No previous immunization	2	-

Three of the cases were under five years of age and the remaining cases were aged five, 11 and 20 years respectively.

Encephalitis

There were 28 notifications of this disease during the year which was an increase of 13 cases over 1972. The following table sets out the aetiology of these cases, indicates the racial incidence, whilst deaths are recorded in parenthesis:-

	White	Coloured	Bantu	Indian	Total
Virus encephalitis	4	1	9 (2)	11 (2)	25(4)
Measles encephalitis	1	1 (1)	1	-	3(1)
Total	5	2	10	11	28(5)

Five deaths were recorded, four of which were due to virus encephalitis and the other to measles encephalitis. The Africans who died were both aged two years, the Coloured was 21 months and the two Indians nine months and two years of age respectively.

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1954 to 1973
(Notification Rate per 1 000 Population Mortality Rate percentage of Total Notifications)

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Year	WHITE						COLOURED						BANTU						INDIAN						ALL RACES					
	Notifications			Deaths			Notifications			Deaths			Notifications			Deaths			Notifications			Deaths			Notifications			Deaths		
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
1954	25	0,17	1	4,00	8	0,44	-	-	48	0,30	6	12,50	19	0,12	-	-	100	0,21	7	7,00										
5	75	0,50	1	1,33	34	1,82	2	5,88	102	0,61	16	15,69	69	0,42	15	21,74	280	0,56	34	12,14										
6	70	0,46	5	7,14	13	0,67	1	7,69	43	0,24	17	39,53	69	0,42	12	17,39	195	0,37	35	17,95										
7	38	0,25	4	10,53	5	0,21	-	-	37	0,21	11	29,73	31	0,16	3	9,68	111	0,20	18	16,21										
8	38	0,25	3	7,89	6	0,24	-	-	57	0,31	13	22,81	70	0,34	15	21,43	171	0,30	31	18,13										
9	24	0,15	-	-	12	0,46	1	8,33	55	0,29	4	7,27	24	0,11	5	20,83	115	0,19	10	8,69										
1960	9	0,06	1	11,11	7	0,28	-	-	56	0,31	6	10,71	22	0,10	4	18,17	94	0,16	11	11,70										
1	8	0,05	-	-	4	0,16	-	-	63	0,34	11	17,46	28	0,12	3	10,71	103	0,17	14	13,59										
2	10	0,06	1	10,00	5	0,19	-	-	46	0,24	7	15,22	9	0,04	2	22,22	70	0,11	10	14,29										
3	3	0,02	-	-	6	0,22	1	16,67	17	0,09	1	5,88	12	0,05	3	25,00	38	0,06	5	13,16										
4	5	0,03	-	-	2	0,07	-	-	15	0,08	2	13,33	11	0,05	5	45,45	33	0,05	7	21,21										
5	1	0,006	-	-	2	0,07	-	-	13	0,07	2	15,38	3	0,01	-	-	19	0,03	2	10,53										
6	2	0,01	-	-	1	0,03	1	100,00	16	0,08	3	18,75	21	0,08	6	28,57	40	0,06	10	25,00										
7	1	0,005	-	-	2	0,07	-	-	18	0,09	5	27,78	8	0,03	2	25,00	29	0,04	7	24,14										
8	1	0,005	-	-	6	0,19	-	-	9	0,04	1	11,11	14	0,05	3	21,43	30	0,04	4	13,33										
9	-	-	-	-	1	0,03	-	-	14	0,07	4	28,57	14	0,05	3	21,43	29	0,04	7	24,14										
1970	-	-	-	-	1	0,02	-	-	3	0,01	1	33,33	1	0,003	1	100,00	5	0,006	2	40,00										
1	-	-	-	-	4	0,09	-	-	4	0,02	-	-	3	0,01	-	-	11	0,01	-	-										
2	-	-	-	-	2	0,04	-	-	3	0,01	-	-	2	0,01	1	50,00	7	0,01	1	14,29										
3	1	0,005	-	-	-	-	-	-	3	0,01	1	33,33	2	0,01	-	-	6	0,01	1	16,66										

Erysipelas

The two notifications during the year were of the White group, aged 78 and 82 years respectively. There was no connection between the two cases.

Gonococcal Ophthalmia

The two cases notified were both White, aged 10 days and two weeks respectively. One case was notified by Addington Hospital, the other by a local ophthalmologist. This was an increase of one case over last year's figures.

Leprosy

The three notifications comprised two Africans and one Indian. The cases, all adults, were aged 18, 40 and 45 years, the sex distribution being two males and one female. The Indian case had been resident in Durban all his life whereas the two Africans had lived in Durban for five and 15 years respectively.

Malaria

Twenty five cases of malaria, all of whom were infected outside the Republic's borders, were notified during the year. In 19 of these cases Plasmodium falciparum was responsible for the infection, five cases were due to Plasmodium vivax and in the remaining case Plasmodium malariae was the parasite involved.

Meningococcal Meningitis

The seven cases notified during the year was a decrease of 13 compared with 1972. One death occurred, an African youth aged 8 years.

The following table sets out the notifications since 1964, with deaths in parenthesis:

Year	White	Coloured	Bantu	Indian	Total
1964	5 (-)	1 (-)	3 (1)	2 (2)	11 (3)
1965	7 (1)	2 (1)	16 (2)	5 (-)	30 (4)
1966	8 (-)	3 (1)	11 (1)	5 (2)	27 (4)
1967	6 (2)	4 (1)	20 (3)	4 (-)	34 (6)
1968	5 (1)	3 (2)	15 (3)	4 (1)	27 (7)
1969	4 (1)	4 (1)	17 (1)	10 (1)	35 (4)
1970	4 (2)	- (-)	12 (-)	11 (2)	27 (4)
1971	4 (-)	- (-)	8 (-)	3 (1)	15 (1)
1972	7 (-)	1 (1)	8 (1)	4 (1)	20 (3)
1973	2 (-)	3 (-)	2 (1)	- (-)	7 (1)

Puerperal Sepsis

The 13 notifications received were one more than in 1972, and consisted of 11 Africans and two Indians. Two deaths were recorded, both Africans, aged 20 and 23 years respectively. Eight of these cases gave birth to their babies in local hospitals.

Scarlet Fever

There were 38 notifications of this disease during the year, an increase of six compared with 1972. There were 37 White cases and one Coloured.

Three cases were admitted to hospital whilst the remainder were cared for at home, where conditions were acceptable to this department for home isolation and nursing.

Tetanus

The number of notifications, namely 10, was the lowest recorded since the disease became notifiable in December 1964. The following table sets out the notifications of tetanus since that date. Deaths are recorded in parenthesis.

Year	White	Coloured	Bantu	Indian	Total
1965	-	4 (2)	15 (5)	9 (1)	28 (8)
1966	-	- (-)	22 (14)	9 (4)	31 (18)
1967	-	- (-)	24 (12)	3 (2)	27 (14)
1968	-	- (-)	9 (4)	8 (6)	17 (10)
1969	-	1 (1)	17 (5)	10 (5)	28 (11)
1970	-	- (-)	12 (8)	10 (4)	22 (12)
1971	-	- (-)	6 (3)	5 (4)	11 (7)
1972	-	1 (1)	9 (5)	7 (6)	17 (12)
1973	-	- (-)	9 (5)	1 (-)	10 (5)

The age and racial distribution are tabulated below. Of the 10 cases, two were in respect of tetanus neonatorum. Five deaths were recorded and these are included in parenthesis in the table:-

Ages	White	Col.	Bantu	Indian	Total
0 - 31 days	-	-	2 (1)	-	2 (1)
1 month - 5 months	-	-	-	-	-
6 months - 11 months	-	-	-	-	-
1 year - 4 years	-	-	-	-	-
5 years - 9 years	-	-	1	-	1
10 years - 19 years	-	-	-	-	-
20 years - 29 years	-	-	1	-	1
30 years - 39 years	-	-	2 (2)	1	3 (2)
40 years and over	-	-	3 (2)	-	3 (2)
Total	-	-	9 (5)	1	10 (5)

Poliomyelitis

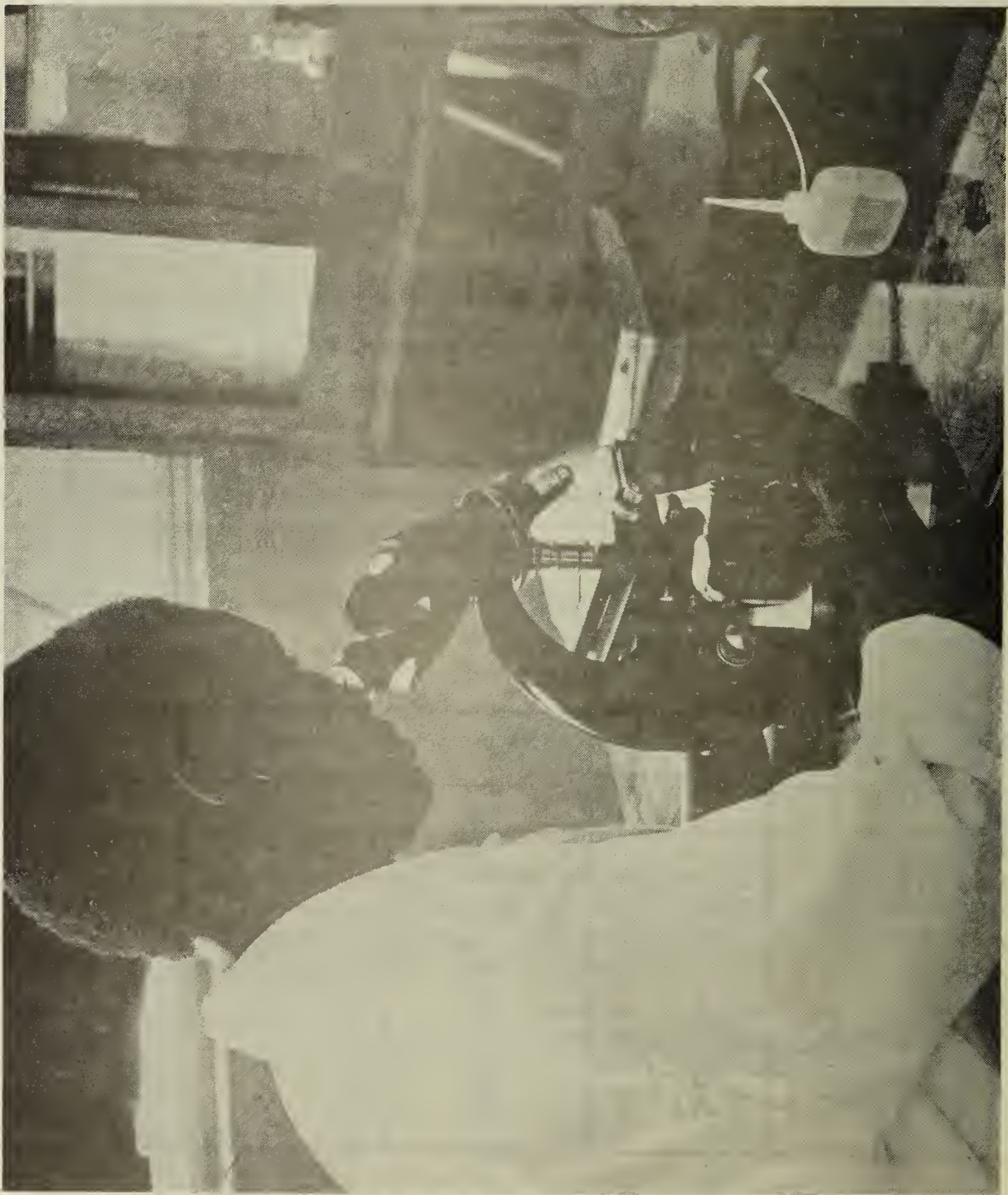
There were three cases notified during the year, a decrease of 18 compared with the 21 cases notified during 1972. The racial distribution was two Africans and one Indian and the ages ranged from six months to three years. The immunization state and age groups of the cases are depicted hereunder :-

Age	Immunization State		Total
0 - 11 months	3 doses	0	1
	2 doses	0	
	1 dose	0	
	Nil	1	
1 year to 1 year 11 months	3 doses	0	1
	2 doses	0	
	1 dose	0	
	Nil	1	
3 years	3 doses	1	1
	2 doses	0	
	1 dose	0	
	Nil	0	

No deaths were recorded during the year.

The following table sets out the notifications in racial groups since 1963 :-

Year	White	Coloured	Bantu	Indian	Total
1963	1	-	20	5	26
1964	-	-	7	1	8
1965	-	-	9	-	9
1966	1	-	12	6	19
1967	-	-	-	-	-
1968	-	3	10	-	13
1969	1	2	17	2	22
1970	-	-	2	1	3
1971	-	-	33	2	35
1972	-	2	16	3	21
1973	-	-	2	1	3



A LABORATORY - THE FINAL PROOF OF INFECTION

Typhoid Fever

Forty three cases of typhoid fever were notified during the year comprising 12 Whites, four Coloureds, 17 Africans and 10 Indians. This represented a decrease of five cases compared with 1972. One death was recorded, a White male aged 54 years.

Eight of the cases were connected in that seven, including an African domestic, were from the same household and another, a neighbour, was a frequent visitor to the home. All cases contracted the disease within one week of each other. The head of this household, a pathologist, and his daughter were employed in the pathology department of a local hospital. Despite extensive investigations the actual source of this infection could not be traced. Another two of the White cases were brother and sister and contracted the disease within a few days of each other. It was accepted that the source of infection was the African domestic who had exhibited symptoms suggestive of typhoid but had left this household a week prior to the onset of the illness in these two cases. Two of the African cases were sisters and in this instance the source of the infection was traced to an aunt, ill on arrival at their home from Mtubatuba and who had taken over the food-handling in the home.

The highest incidence of the disease occurred during the months of March (7 cases) and December (9 cases).

The following table indicates the age and racial distribution of the cases:-

Age	White	Col.	Bantu	Ind.	Total
0 - 4 years	1	1	-	-	2
5 - 9 years	2	-	2	3	7
10 - 14 years	2	3	4	4	13
15 - 19 years	1	-	1	2	4
20 - 24 years	2	-	4	1	7
25 - 29 years	1	-	3	-	4
30 - 39 years	-	-	2	-	2
40 - 49 years	2	-	-	-	2
50 years plus	1	-	1	-	2
Total	12	4	17	10	43

Eight cases of typhoid fever occurred in kwa-Mashu, two in Chesterville, one in Lamontville and seven in the Chatsworth Indian Township.

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1954. From 1966 these statistics refer only to cases where *S. typhi* was the causative agent.

TYPHOID : NOTIFICATIONS AND DEATHS : 1954 TO 1973 (Notification Rate per 1 000 Population : Mortality Rate percentage of Total Notifications)																
Year	WHITE			COLOURED			BANTU			INDIAN			ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1954	5	0,04	-	-	4	0,22	74	0,48	9	12,16	9	0,06	92	0,19	11	11,96
5	8	0,05	-	-	3	0,16	73	0,44	4	5,48	16	0,10	100	0,20	4	4,00
6	5	0,03	-	-	1	0,05	52	0,30	3	5,77	9	0,05	67	0,13	3	4,48
7	6	0,04	1	16,66	1	0,04	110	0,61	6	5,45	5	0,03	122	0,22	8	6,56
8	7	0,04	-	-	5	0,19	246	1,32	22	8,13	20	0,09	278	0,49	24	8,63
9	6	0,04	-	-	1	0,04	280	1,45	21	7,50	16	0,07	303	0,51	24	7,92
1960	8	0,05	1	12,50	4	0,16	71	0,39	3	4,22	7	0,03	90	0,16	4	4,44
1	2	0,01	-	-	2	0,08	39	0,21	2	5,13	16	0,07	59	0,10	3	5,08
2	5	0,03	-	-	-	-	25	0,13	-	-	11	0,05	41	0,07	-	-
3	1	0,01	-	-	3	0,11	25	0,13	1	4,00	6	0,03	35	0,06	1	2,86
4	2	0,01	-	-	1	0,04	30	0,15	3	10,00	10	0,04	43	0,07	3	6,98
5	5	0,03	-	-	1	0,03	23	0,12	-	-	10	0,04	39	0,06	-	-
6	-	-	-	-	3	0,10	37	0,18	3	8,11	12	0,05	52	0,08	3	5,77
7	2	0,01	-	-	2	0,07	23	0,11	1	4,35	10	0,04	37	0,05	1	2,70
8	4	0,02	-	-	-	-	20	0,10	3	15,00	19	0,07	43	0,06	3	6,98
9	6	0,03	-	-	5	0,15	24	0,11	8	33,33	9	0,03	44	0,06	8	18,18
1970	2	0,01	-	-	-	-	30	0,15	3	10,00	5	0,02	37	0,05	3	8,11
1	16	0,08	1	6,25	1	0,07	31	0,15	5	16,13	14	0,05	64	0,08	7	10,94
2	2	0,01	-	-	-	33,33	39	0,18	4	10,26	6	0,02	48	0,06	4	8,33
3	12	0,06	1	8,33	-	-	17	0,07	-	-	10	0,03	43	0,05	1	2,32

Viral Hepatitis

A total of 196 notifications was received, of which 59 were Whites, 15 Coloureds, 29 Africans and 93 Indians. This represents a decrease of 23 compared with 1972. Three deaths were recorded, one Coloured, one African and one Indian. Eighty-three of the notifications were in respect of hospitalised cases, 81 of these being non-white.

Two of the cases had received blood transfusions prior to the onset of the illness and from the case histories a diagnosis of serum hepatitis was considered.

B. OTHER INFECTIOUS DISEASES

The only statistics available to indicate the prevalence of non-notifiable infectious diseases are obtained from two sources:-

- (i) admissions of cases to hospital for isolation and treatment; and
- (ii) monthly returns by school principals.

Table I : Admissions of Cases to Hospitals

Disease	White	Col.	Bantu	Indian	Total
Chickenpox	5	1	50	5	61
Measles	35	25	228	25	313
Mumps	7	1	5	-	13
Rubella	1	-	-	-	1
Whooping Cough	3	3	31	4	41

Table II : School Notifications (White, Coloured and Indian only)

Month	Chicken-pox	Measles	Mumps	Rubella	Whooping Cough
January	4	43	42	2	1
February	13	135	126	13	5
March	37	159	145	7	7
April	11	106	158	12	4
May	26	159	154	7	10
June	42	225	225	6	8
July	14	121	85	1	6
August	35	284	180	19	7
Sept.	44	335	192	35	25
Oct.	141	441	242	41	5
Nov.	110	293	214	52	8
Dec.	1	3	2	-	-
Total	478	2 304	1 765	195	86

Figures indicate trends only and do not reflect the total number of cases occurring in the City.

IV. TUBERCULOSISINTRODUCTION

The following are the number of known current cases of pulmonary tuberculosis in Durban as at the end of the year 1973:-

Race	City Cases	Ex-City Cases	Total
White	603	138	741
Coloured	552	114	666
Bantu	8 299	3 944	12 243
Indian	3 677	319	3 996
Total	13 131	4 515	17 646

Closed case files are not included in this table.

The ex-City group comprises:-

- (i) cases living outside the Durban Municipal area but working and receiving treatment in Durban;
- (ii) country cases (particularly Bantu) who have come to Durban because of their illness and are then found to be suffering from pulmonary tuberculosis whilst sojourning in this City;
- (iii) known pulmonary tuberculosis cases who are either visiting relatives or have permanently moved to Durban.

Despite the repeal of Section 53(5) of the Public Health Act regarding domicile, this department continues to assess City and ex-City cases as in the past, both for epidemiological purposes and to maintain a uniform base line for valid statistical comparison in the future.

The total number of City cases is 17% lower while ex-City cases are 0,53% higher than last year.

STATISTICS OF CITY CASES

All statistics are computer programmed and stored on tape so that various epidemiological information can be retrieved when required.

(a) Pulmonary Tuberculosis(i) Notifications

The number of notifications of pulmonary tuberculosis received during 1973 is set out in the following table, together with the figures since 1964:-

Year	White	Coloured	Bantu	Indian	Total
1964	121	110	1 256	479	1 966
1965	100	98	1 336	532	2 066
1966	102	105	1 656	549	2 412
1967	133	149	1 566	575	2 423
1968	79	103	1 262	495	1 939
1969	81	100	1 234	469	1 884
1970	95	124	1 099	459	1 777
1971	87	99	1 067	445	1 698
1972	75	120	941	375	1 511
1973	58	103	891	354	1 406

In addition to the notifications above, a further 20 City notifications were recorded in respect of old cases not previously notified to this department. These cases are still coming to light following the transfer of the Durban Chest Clinic from the State Health Department to this local authority in 1969. The racial breakdown of these old cases is as follows:-

White	Coloured	Bantu	Indian	Total
1	2	14	3	20

These notifications have not been included in the 1973 figures as they would distort the statistics and should more correctly be applied to those previous years when the diagnosis was in fact made. In comparing statistics from the year 1970 and onwards, it must be remembered therefore, that the notifications and attack rates for the years prior to 1970 would in fact have been slightly higher than recorded.

The corresponding attack rate per 1 000 population, excluding the 20 notifications mentioned above, are shown in the following table;

Year	White	Coloured	Bantu	Indian	Total
1964	0,69	3,91	6,43	1,96	3,06
1965	0,56	3,03	6,74	2,12	3,14
1966	0,56	3,52	8,23	2,14	3,60
1967	0,76	4,85	7,68	2,18	3,55
1968	0,42	3,27	6,11	1,83	2,78
1969	0,42	3,09	5,89	1,69	2,66
1970	0,49	2,91	5,48	1,58	2,45
1971	0,44	2,24	5,10	1,46	2,25
1972	0,38	2,64	4,38	1,20	1,96
1973	0,29	2,24	4,08	1,11	1,80

The age group distribution, including the 20 mentioned above, notified during 1973 was:-

Ages	White	Col.	Bantu	Indian	Total
0 - 4 years	9	22	134	60	225
5 - 14 "	4	10	75	27	116
15 - 24 "	-	17	111	93	221
25 - 44 "	11	26	381	100	518
45 - 64 "	18	26	183	66	293
65 yrs. & over	17	4	21	11	53
Total	59	105	905	357	1 426

Source of Notifications

Of the 1 406 new pulmonary tuberculosis cases notified, the sources of notifications were:-

Tuberculosis clinics	907
Hospitals	477
Other.....	22

Comment

Of the 1 406 notifications, 16 were in respect of children 0 - 4 years old with a positive Tuberculin test and no evidence of pulmonary tuberculosis radiologically or a history of having received BCG immunization.

The downward trend in notifications in respect of new active cases of pulmonary tuberculosis since 1967 continued through 1973, with the total being 7,14% lower than the previous year's figure of 1 511. The actual number of notifications and the attack rate was, in each race group, lower than the previous year.

This downward trend in the incidence of pulmonary tuberculosis must be ascribed mainly to the improved standard of living of the non-whites and to a lesser degree to this Department's intensive clinic and field programmes.

(ii) Deaths

Deaths of City cases for 1973, corrected for inward and outward transfers are set out below:-

Year	White	Coloured	Bantu	Indian	Total
1964	9	8	108	23	148
1965	15	13	120	30	178
1966	11	10	57	19	97
1967	9	7	82	24	122
1968	7	10	73	16	106
1969	6	3	50	21	80
1970	7	5	65	19	96
1971	3	8	54	14	79
1972	4	1	57	18	80
1973	2	6	49	14	71

The death rates per 1 000 population were:-

Year	White	Coloured	Bantu	Indian	Total
1964	0,05	0,28	0,55	0,09	0,23
1965	0,08	0,44	0,60	0,11	0,27
1966	0,06	0,33	0,28	0,07	0,14
1967	0,05	0,23	0,40	0,09	0,18
1968	0,04	0,32	0,35	0,06	0,15
1969	0,03	0,09	0,24	0,08	0,11
1970	0,04	0,11	0,32	0,06	0,13
1971	0,01	0,18	0,25	0,04	0,10
1972	0,02	0,02	0,27	0,06	0,10
1973	0,01	0,13	0,22	0,04	0,09

Comment

The overall death rate was slightly lower than 1972 although the rate for Coloureds was higher.

(b) Non-Pulmonary Tuberculosis(i) Notifications

The total notifications of non-pulmonary tuberculosis since 1964 are set out below:-

Year	White	Coloured	Bantu	Indian	Total
1964	6	1	50	44	101
1965	2	2	50	48	100
1966	2	-	46	37	85
1967	-	-	29	31	60
1968	1	-	45	37	83
1969	-	1	35	41	77
1970	1	1	31	23	56
1971	2	5	41	27	75
1972	2	2	42	27	73
1973	2	3	50	25	80

These 80 notifications for 1973 have been analysed according to age groups as follows:-

Ages	White	Col.	Bantu	Indian	Total
0 - 4 years	1	1	7	-	9
5 - 14 years	1	-	5	2	8
15 - 24 years	-	-	8	8	16
25 - 44 years	-	1	15	10	26
45 - 64 years	-	1	13	5	19
65 years & over	-	-	2	-	2
Total	2	3	50	25	80

Comment

A further 60 cases were notified as suffering from non-pulmonary tuberculosis in addition to existing pulmonary tuberculosis involvement. Thus there was a total of 140 infections of non-pulmonary tuberculosis, the various conditions being:-

Tuberculosis meningitis....	33	Tuberculosis skin....	1
Tuberculosis bone and joints.	24	Tuberculosis peri-carditis.....	10
Tuberculosis lymphadenitis.	27	Tuberculosis epidi-dymitis	1
Tuberculosis peritonitis...	8	Tuberculosis gastro-intestinal.....	2
Tuberculosis endometritis..	3	Tuberculosis miliary	3
Tuberculosis kidney.....	1	Tuberculosis other	27

It is noted that the number of cases of tuberculosis meningitis was relatively low during 1970 and 1971 compared to previous and subsequent years. The only apparent reason for this was the failure of a large tuberculosis institution to notify these cases doubtless due to a misapprehension that the condition was not notifiable. The matter was corrected in January 1973.

(ii) Deaths

The number of deaths from non-pulmonary tuberculosis for the year, corrected for inward and outward transfers, is reflected hereunder:-

Year	White	Coloured	Bantu	Indian	Total
1964	1	-	28	12	41
1965	1	1	21	5	28
1966	1	5	29	5	40
1967	1	1	29	9	40
1968	-	2	17	5	24
1969	-	2	12	7	21
1970	-	-	4	2	6
1971	-	2	5	6	13
1972	1	-	3	1	5
1973	-	-	7	3	10

Hospital Admissions

During 1973 a total of 808 City cases were admitted to various hospitals and comprised 28 Whites, 58 Coloureds, 495 Bantu and 227 Indians. This was a large decrease compared with the 1 225 cases admitted during 1972, and can be ascribed mainly to the request of the State Health Department to reduce hospital admissions and treat more cases on an outpatient basis. Discharges of City cases totalled 970, made up of 42 Whites, 77 Coloureds, 612 Bantu and 239 Indians. Seventy one patients either absconded or left hospital against medical advice, and were immediately followed up by the field staff of this Department to ensure continuation of treatment at clinic or re-hospitalisation where necessary.

King George V Hospital

This large State-controlled hospital is situated within the Borough of Durban so it is appropriate to include the following statistics for the year 1973, kindly supplied by the Medical Superintendent.

King George V Hospital	White	Col.	Bantu	Ind.	Total
Admissions	164	127	2 862	368	3 517
Discharges (including deaths, abscondments, etc.)	162	135	2 924	368	3 589
Deaths	10	16	241	36	303

Year	Irregular discharges as a percentage of all discharges	Pulmonary tuberculosis "relapse" rate (ratio of readmissions to total admissions)
1964	11,0%	17,0%
1965	8,1%	17,3%
1966	8,7%	16,0%
1967	7,0%	9,5%
1968	4,7%	10,9%
1969	5,8%	8,9%
1970	5,2%	8,7%
1971	6,4%	8,8%
1972	6,2%	9,0%
1973	5,6%	7,4%

OUTPATIENT SERVICES

Other than the take over of the Durban Chest Clinic in 1969, no new Municipal clinics have been established since 1966. When the new family health clinic is opened in the Coloured housing scheme of Wentworth, it is proposed to open a tuberculosis session there once per week. This is likely to commence in January, 1975.

Throughout 1973 all clinics functioned satisfactorily. At the peripheral non-white township clinics, X-Ray facilities were provided by two mobile 100 mm X-Ray machines. The following timetable shows the various clinics operating within this City -

Clinic	Race	Day
Durban Chest Clinic	All races	Monday to Friday
kwaMashu	Bantu	Monday to Friday
Merebank	Indian	Fridays only
Bayview (Chatsworth Unit 2)	Indian	Tuesdays only
Chatsworth Township (Unit 6)	Indian	Mondays and Thursdays
Lamontville	Bantu	Wednesdays only

On the whole the work throughout was slightly less compared to the previous year.

Clinic Statistics

The following statistics reflect work performed at this department's pulmonary tuberculosis outpatient clinics during 1973 and apply to City and Ex-City cases:-

Details	Durban Chest Clinic		kwa-Mashu		Merebank		Chatsworth		Lamontville	Total
							Township Centre	Bay View		
Sessions	248		248		49		100	50	50	745
Attendances	101	255	30	475	4	234	16 070	4 713	8 942	165 689
Streptomycin: injections	11	498	5	648	23		585	257	2 138	20 149
Tuberculin tests	4	736	2	420	946		3 676	494	1 028	13 300
BCG vaccination	2	387	2	512	632		2 500	348	468	8 847
X-Rays	90	131	6	004	588		2 135	1 237	1 504	101 599
Suspects seen	10	376	3	195	1	109	4 031	694	1 130	20 535
Contacts seen	4	600	1	637	112		497	291	424	7 561

During the year the following numbers of suspects and contacts were admitted to these clinics for the first time:-

Durban Chest Clinic	kwa-Mashu	Merebank	Chatsworth		Lamontville	Total
			Bay-View	Township Centre		
14 976	4 832	1 221	985	4 528	1 554	28 096

Investigations of these persons yielded the following cases of pulmonary tuberculosis:-

Details	Durban Chest Clinic	kwa-Mashu	Merebank	Chatsworth		Lamontville	Total
				Bay-view	Township Centre		
Pulmonary tuberculosis	906	373	11	46	74	118	1 528
Pulmonary tuberculosis cases as a % of clinic admissions	6,05%	7,7%	0,9%	4,7%	1,6%	7,6%	5,44%

At the Durban Chest Clinic, influx control and pre-employment X-Rays were undertaken in addition to the suspects and contacts mentioned above. The yield of pulmonary tuberculosis cases among these categories is given hereunder:-

Group	Influx Control (Bantu)		Pre-employment (all races)	
	Total X-Rayed	Pulmonary Tuberculosis cases as % of total X-Rayed	Total X-Rayed	Pulmonary tuberculosis cases as % of total X-Rayed
White	-	-	2 870	0,07%
Coloured	-	-	1 271	0,08%
Bantu	18 973	0,24%	11 371	0,09%
Indian	-	-	11 048	0,22%

Tuberculin testing is performed routinely on children under 15 years and precedes BCG vaccination at all



X-RAY EXAMINATION AT A TUBERCULOSIS CLINIC

departmental clinics. The following table analyses the tuberculin tests performed at the various clinics during the year :-

Tuberculin Tests	Durban Chest Clinic	kwa-Mashu	Merebank	Chatsworth		Lamontville
				Bay View	Township Centre	
Tests done	4 736	2 420	946	494	3 676	1 028
Tests read	3 141	2 155	834	486	3 319	866
% Read	66,4%	89%	88,2%	98,4%	90,3%	84,2%
Positive	600	1 408	393	262	1 242	521
Negative	2 541	747	441	224	2 077	345
% of Positive tests read	19,1%	65,3%	47,1%	58%	37,4%	60,2%

BCG ADMINISTRATION AND SCHOOLS PROGRAMME

BCG vaccine is administered to the following major groups in Durban:-

- (i) newborns delivered at King Edward VIII Hospital, McCord Zulu Hospital, St. Aidan's Mission Hospital, Shifa Hospital and R.K. Khan Hospital (commenced in July 1973);
- (ii) tuberculin negative reactors attending the tuberculosis clinics;
- (iii) tuberculin negative reactors discovered on testing of non-white school children.

At the beginning of each year the routine school programme commences and Indian, Bantu and Coloured schools are visited. Class I, Standard 6 and Standard 10 pupils at Bantu schools, and Class I and Standard 8 pupils at Indian and Coloured schools are tuberculin tested and negative reactors given BCG vaccine. Where tuberculin tests are strongly positive the scholars as well as their family contacts are investigated for pulmonary tuberculosis.

The total number of BCG vaccinations administered in the City during 1973 was made up as follows:-

Newborns at King Edward VIII Hospital	13 387
Newborns at McCords Zulu Hospital	2 281
Newborns at St. Aidan's Mission Hospital	4 071
Newborns at Shifa Hospital	810
Newborns at R.K.Khan Hospital	1 830
Municipal Tuberculosis Clinics	8 847
School Programme	22 687
Total	<u>53 913</u>

FIELD WORK AND CONTROL PROGRAMMES

The staff at the end of the year responsible for tuberculosis field work comprised four White health visitors, one White health inspector, 16 Bantu and eight Indian health assistants. They were responsible for investigating all new notifications of pulmonary tuberculosis, referring contacts and suspects to clinics, maintaining contact with pulmonary tuberculosis cases and their families, tracing defaulters both from hospital and clinic, and initiating supplementary feeding in terms of the State Health Scheme for Indigent Tuberculosis Cases as well as other financial help from the appropriate welfare organisations and authorities.

Field visits during the year totalled 51 354 (51 500 in 1972); and were made up of 3 687 visits to Whites, 3 596 to Coloureds, 25 758 to Bantu and 18 313 to Indians.

MOBILE MASS X-RAY FOR COMMERCE AND INDUSTRY

The State Health Department operates 70 millimetre mobile mass X-Ray units and these are available to provide a pulmonary tuberculosis screening service to commerce and industry at a fee of 32 cents per head. During the year 36 250 such X-Rays were carried out in Durban.

SUPPLEMENTARY FEEDING OF INDIGENT TUBERCULOSIS CASES

A sum of R9 000 was again available during the year for the purchase of foodstuffs to supplement the diet of indigent pulmonary tuberculosis patients.

During the year 5 540 rations were distributed compared with 7 373 in 1972. Although foodstuff prices have increased considerably, fewer patients required rations and all requirements were adequately met.

The following table reflects the number of patients on rations, as well as the rations given them during the year:-

Age Group: Years	White		Coloured		Bantu		Indian		Total	
	Pat- ients	Rations	Pat- ients	Rations	Pat- ients	Rations	Pat- ients	Rations	Pat- ients	Rations
0 - 4 years	-	-	3	52	26	301	25	528	54	881
5 - 8 "	-	-	10	209	16	125	10	230	36	564
9 -12 "	-	-	6	41	4	65	9	156	19	262
13 years and over	3	121	27	520	119	1814	66	1378	215	3833
Total	3	121	46	822	165	2305	110	2292	324	5540

DOMICILIARY ASSISTANCE

The Natal Anti-Tuberculosis Association continued its good work in rendering assistance in cash and kind to tuberculosis sufferers and their dependents who were unable to work or were unemployed. The four White health visitors mentioned above serve on the care work committee of this association which allocates this aid. During 1973 a total of R11 860 was distributed in this manner.

The Friends of the Sick Association (FOSA) gave assistance to the Indian community in Natal and provided grants of R16 745 during the year which was a very commendable effort.

V. VENEREAL DISEASES

INTRODUCTION

This report is in respect of all Special Clinics (Venereal Disease Clinics) operated in Durban but does not reflect cases treated at hospitals, by district surgeons nor private practitioners as no return to the local authority is legally required.

There are three Special Clinics in Durban situated at Addington Hospital for Whites and Coloureds, at King Edward VIII Hospital for Bantu and Indians, and in the kwaMashu Bantu Township for Bantu. The Addington Hospital clinic is conducted by the Provincial Administration on behalf of the Durban City Council and the other clinics by the City Health Department.

NEW CASES

The total number of new cases of all races seen in Durban at the Special Clinics during 1973 was 23 871 compared with 24 281 during 1972. Of these, 15 847 were new City cases which represents a rate of 2,00 per 100 population. This figure represents a slight decrease compared with the rate for the previous year.

Reports from overseas and within the Republic stressed increasing incidences of venereal diseases. While the statistics below indicate a slight overall decrease of these diseases in Durban, it is emphasised that there are no statistics to indicate whether there was a shift of patients from the special clinics to hospitals and private practitioners. Indications, at least among non-whites, are that this was not a major factor. That the incidence in Durban would be high can be expected, the city being a major seaport and holiday resort.

The following table sets out the number of new City cases in racial groups for 1973, 1972 and 1964 (10 years ago) with the attack rate of venereal disease per 100 population:-

NEW CITY CASES						ATTACK RATE PER 100 POPULATION				
Year	White	Col.	Bantu	Ind.	Total	White	Col.	Ban.	Ind.	Tot.
1964	492	499	11 370	853	13 214	0,28	1,77	5,82	0,35	2,05
1972	511	171	14 975	1 014	16 671	0,25	0,38	6,97	0,32	2,16
1973	427	160	14 350	910	15 847	0,21	0,34	6,50	0,28	2,00

TOTAL ATTENDANCES

The total attendances of City and ex-City cases at all three clinics was 54 493, a decrease of 2,39% compared with the previous year's total of 55 827. The subjoined tables set out in racial groups the new cases and total attendances at the various clinics in Durban during 1973.

CLINIC SERVICES

Addington Hospital: This clinic is conducted by the Provincial Administration which is reimbursed by the Durban Municipality on a per capita basis in respect of City cases treated. One session is held each day from Monday to Saturday for Whites and Coloureds. Total attendances (City and ex-City cases) for the year were as follows:-

Race	New Cases			Total Attendances		
	Male	Female	Total	Male	Female	Total
White	404	68	472	1 293	139	1 432
Coloured	107	19	126	522	58	580

Congella and kwaMashu: The Congella Clinic is in the precincts of King Edward VIII Hospital and operates from Mondays to Fridays. The kwaMashu Clinic functions for one three-hour session each Wednesday morning.

These clinics operated satisfactorily during the year and the vacant post of Medical Officer was eventually filled during September and brought much needed relief to the remaining two doctors who had been carrying the extra burden for 18 months.

There was a slight decrease in the number of new cases seen as well as total attendances and this is reflected in the lower attack rate.

At kwaMashu there was actually an increase in new cases seen and this was directly due to the screening of work seekers at the Bantu Affairs office at kwaMashu instead of Durban as had previously been the case.

Total attendances at these two clinics during the year were:-

Race	New Cases			Total Attendances		
	Male	Female	Total	Male	Female	Total
Bantu	15 015	7 028	22 043	35 060	15 266	50 326
Indian	580	495	1 075	1 152	1 003	2 155

(N.B. This table refers to number of diseases diagnosed NOT number of cases)

DETAILS	NEW CASES										TOTAL ATTENDANCES									
	White		Col.		Bantu		Indian		Total		White		Col.		Bantu		Indian		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Sero-negative primary syphilis	5	-	4	-	-	-	-	-	-	-	37	-	11	-	-	-	-	-	48	-
2. Sero-positive primary syphilis	5	-	4	2	972	275	15	4	996	281	19	-	30	8	2 546	688	45	13	2 640	709
3. Secondary syphilis	-	-	1	1	118	567	6	7	125	575	-	-	1	4	296	1 289	9	13	306	1 306
4. Tertiary syphilis (clinically recognised)	4	2	-	1	-	-	-	-	-	3	38	12	-	1	-	-	-	-	38	13
5. Latent syphilis (diagnosed on result of serological test alone)	3	-	1	4	297	576	11	19	312	599	16	8	-	12	1 080	1 834	20	45	1 116	1 899
6. Neuro-syphilis	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	1	-	-	-	1
7. Congenital syphilis (under 1 year)	-	-	-	-	75	69	1	2	76	71	-	-	-	-	205	180	1	3	206	183
8. Congenital syphilis (over 1 year)	-	-	-	-	6	3	-	-	6	3	-	-	-	-	12	11	-	-	12	11
Total syphilis	17	2	10	8	1 468	1 491	33	32	1 528	1 533	110	20	42	25	4 139	4 003	75	74	4 366	4 122
9. Gonorrhoea	229	38	75	22	6 375	1 741	212	124	6 891	1 925	775	81	392	47	14 425	3 631	437	273	16 029	4 032
10. G.C. vulvo-vaginitis	-	-	-	-	-	1	-	1	-	2	-	-	-	-	-	1	-	2	-	3
11. G.C. ophthalmia	-	-	-	-	21	17	1	-	22	17	-	-	-	-	31	38	2	-	33	38
Total G.C. Infections	229	38	75	22	6 396	1 759	213	125	6 913	1 944	775	81	392	47	14 456	3 670	439	275	16 062	4 073
12. Ulcus molle	-	-	10	1	3 315	651	108	53	3 433	705	-	-	17	-	7 912	1 365	236	103	8 165	1 468
13. Lymphogranuloma venereum	-	-	-	-	48	1	1	-	49	1	-	-	-	-	98	7	2	-	100	7
14. Granuloma inguinale	-	-	-	-	182	8	3	-	187	8	-	-	2	-	388	15	7	-	397	15
15. Venereal warts	1	-	2	-	614	144	13	8	630	152	5	-	6	-	1 640	380	23	13	1 674	393
16. Non-specific urethritis	74	-	10	-	1 057	14	12	-	1 153	14	267	-	53	-	2 259	20	26	-	2 605	20
17. Non-venereal	72	35	28	9	1 970	3 053	197	257	2 267	3 354	147	51	74	18	4 241	6 034	324	500	4 786	6 603
Total	147	35	52	10	7 186	3 871	334	318	7 719	4 234	419	51	152	18	16 538	7 821	618	616	17 727	8 506
Grand Total	393	75	137	40	15 050	7 121	580	475	16 160	7 711	1304	152	586	90	35 133	15 494	1 132	965	38 155	16 701
Total of races	468		177		22 171		1 055		23 871		1 456		676		50 627		2 097		54 856	

STATISTICAL SUMMARY : CITY AND EX-CITY CASES TREATED IN 1973

Details	WHITE				COLOURED				BANTU				INDIAN				TOTAL		Grand Total
	City		Ex-City		City		Ex-City		City		Ex-City		City		Ex-City		City	Ex-City	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
New cases	352	75	41	-	122	38	16	1	11 053	3 297	3 769	3 666	508	402	68	70	15 847	7 631	23 478
Total attendance	1 259	152	45	-	575	95	22	4	26 548	7 442	7 966	7 761	1 022	822	120	144	37 915	16 062	53 977

TREATMENT

There were no deaths during the year although comment is made that deaths from anaphylaxis following penicillin injection have been recorded in the past in this Department.

Benzathine penicillin remains the drug of choice in the treatment of both gonorrhoea and syphilis. Other drugs such as Trobicin, Bactrim and Erythromycin are used in occasional cases which prove resistant to penicillin or where penicillin is not tolerated.

CONTACTS

A total of 2 078 visits were made to refer contacts to clinics. Of this total, 44,15% attended for investigation and treatment which is considered a good average and reflects well on the common sense of the contacts and the approach of the health personnel concerned.

DEFAULTERS

During the year 7 566 visits were made to trace and refer defaulters back to the clinics at King Edward VIII Hospital and kwaMashu. Of these 57,95% cases responded and attended the clinics, making the effort most worthwhile for all concerned.

ANTENATAL CASES

A total of 1 683 selected antenatal cases were referred to the Congella and kwaMashu clinics. Of these, 665 (39,51%) were proved serologically positive and were subsequently treated.

LABORATORY EXAMINATIONS(a) Departmental side-room

Examinations were undertaken of urethral and vaginal smears and spun urine deposits for gonococci and other organisms. At the Congella and kwaMashu clinics the following examinations were performed :-

Smears.....	20 160	with 10 134 positive for gonococci (50,26%)
Urines.....	1 761	with 945 positive for gonococci (53,66%)

(b) State Laboratory

Serological examinations on blood specimens taken at the Congella and kwaMashu Special Clinics were carried out by the State Health Laboratory in Currie Road, Durban. During the year 27 720 VDRL tests were done, of which 5 185 (18,7%) were reactive.

VI. FAMILY HEALTH

A. MATERNAL HEALTH

(i) Antenatal Clinics

An antenatal service is provided for those persons who elect to be confined in their own homes by listed certificated Coloured midwives and listed but uncertificated Indian midwives authorised under the Public Health Act to practise in Durban. A medical officer is in attendance, and exfoliative cytology smears are taken from selected patients. In Durban, district midwifery services are carried out only in kwaMashu, operating from the Provincial Administration polyclinic in this area.

The listed midwives are controlled by a supervisor of midwives who is a community nurse. They are compelled to maintain a register and a bag which is inspected and replenished after every confinement; and are instructed under legislation as gazetted under Government Notice No.R650 and R651 of 1971.

Details of attendances and services undertaken are set out below:-

Details	White	Col.	Ind.	Total 1973	Total 1972
Antenatal Clinic sessions	13	12	97	122	122
Attendances	13	26	788	827	1 071
Rhesus factor tests	5	10	206	221	445
Exfoliative cytology tests	6	7	180	193	394
Haemoglobin tests	4	10	213	227	466
Kolmer/VDRL tests	4	10	208	222	441
Antenatal visits	23	7	146	176	191
Postnatal visits by Supervisor	2	3	348	353	493

A reduction in attendances was noted, and with the opening of a midwifery section at the R.K. Khan Hospital in Chatsworth in July, it is to be hoped that the unregistered midwifery service will gradually come to an end.

(ii) Facilities for Maternity Cases

Accommodation for maternity cases in Durban was provided by the following Provincial and private hospitals:-

Institutions	Maternity Beds				
	W.	C.	I/B	Total 1973	Total 1972
1. <u>Provincial</u>					
Addington Hospital	50	48	-	98	89
King Edward VIII Hospital	-	-	239+	239	239
R.K.Khan Hospital (from July)	-	-	86°	86	-
2. <u>Private</u>					
St. Aidan's Hospital	-	-	23++	23	30
St. Augustine's Hospital	29	-	-	29	30
Parklands Nursing Home	22	-	-	22	22
Mothers' Hospital	46	-	-	46	42
McCord's Zulu Hospital	-	-	61+++	61	70
Shifa Hospital	-	-	12++	12	13
Total	147	48	421	616	535

° Indian only

+ Indian and Bantu

++ Indian and Coloured

+++Bantu and Coloured

Indian cases booked at King Edward VIII Hospital before July 1973 were confined at this hospital, but subsequently all cases were directed to the R.K.Khan Hospital.

(iii) Supervision of Midwives

Details of midwife supervision are as follows:-

Details	White	Col.	Ind.	Total 1973	Total 1972
Certificated midwives	-	2	-	2	2
Confinements	10	7	23	40	68
Non-certificated midwives	-	1	24	25	30
Confinements	-	1	376	377	450
Midwives appliances examined	-	6	222	228	224
Visits to midwives at home	-	4	229	233	250

One Coloured trained midwife ceased activity in July. At the year end, 26 midwives were in practice compared with 32 in 1972.

(iv) Family Planning

Family planning clinics were commenced in 1967 when the Durban City Council adopted a resolution that there be a gradual takeover from the Natal Association for Maternal and Family Welfare. The first three clinics to serve the Indian community were commenced in Merebank and Chatsworth. Thereafter in September, 1969, this service was commenced at Newlands for Indian and Bantu and in August 1970 at kwaMashu and Lamontville for Bantu, and Sparks Estate for Coloureds. Chatsworth Township Centre opened in April 1971 in conjunction with a family health service. In October 1971 the new family health clinic in kwaMashu was completed and services were introduced there. In May, 1972 further services were provided at Austerville for Coloureds and extra sessions proved necessary soon afterwards. Lancer's Road, the central clinic for Bantu, commenced in November, 1972.

All clinics are conducted as an integral part of Family Health with a medical officer generally in attendance to see new and referred cases. The majority of attenders were placed on the oral contraceptive regimes. A long-acting progesterone product given at three-monthly intervals was in use, a total of 6 508 injections being given in 1973 (6 121 in 1972).

In 1973, further venues and increased sessions were as follows:-

- | | | |
|----------|---|---|
| July | - | A second session for Bantu at Goodwin's Cottage, kwa-Mashu. |
| October | - | A second session for Bantu at Lancers Road |
| | | One session for Indians at Lancers Road |
| November | - | One session for Whites at Warwick Avenue |
| | | Two sessions for Bantu at Chesterville |
| | | A session at Redhill for Coloureds |
| | | Two sessions at Clairwood for Indians |

A full-time post of Clinical Medical Officer, Family Planning, was established and filled during September. This enabled further expansion of services towards the end of the year.

Approval was obtained from the State Health Department for the creation of eight full-time nursing posts for family planning which were to be filled early in 1974.

Details of attendances at family planning clinics are tabulated below:-

Community and Venue	Sessions	First Attendance	Re-attendance	Total Attendance 1973	Total Attendance 1972
<u>White:</u>					
Warwick Avenue (Dec.1973)	6	42	12	54	-
<u>Coloured:</u>					
Austerville	49	206	959	1 165	562
Redhill (Nov.1973)	7	28	5	33	-
Sparks Estate	49	237	1 908	2 145	1 884
Warwick Avenue (Nov.1973)	7	50	23	73	-
Wentworth Govt. Village	49	130	870	1 000	-
Total	161	651	3 765	4 416	2 446
<u>Bantu:</u>					
Chesterville (Nov.1973)	14	17	7	24	-
Goodwin's Cottage, kwaMashu	75	695	5 506	6 201	4 935
Lamontville	49	405	3 006	3 411	3 635
Lancers Road	58	215	270	485	31
Newlands (Sept.1973)	9	-	10	10	27
Rydalvale, kwaMashu	108	1 258	8 444	9 702	6 161
Total	313	2 590	17 243	19 833	14 789
<u>Indian:</u>					
Chatsworth-Bay View	149	444	9 694	10 138	9 745
" Woodhurst	147	457	7 098	7 555	5 723
" Township Centre	248	945	17 663	18 608	16 711
Clairwood (Dec.1973)	9	29	7	36	-
Lancers Road (Oct.1973)	10	92	78	170	-
Merebank	147	320	7 690	8 010	7 140
Newlands	51	175	2 594	2 769	2 038
Total	761	2 462	44 824	47 286	41 357
Grand Total	1 241	5 745	65 884	71 589	58 592

EXPOLIATIVE CYTOLOGY

EXAMINATIONS

YEAR 1973

Age Group in Years	WHITES					COLOURED					BANTU					INDIANS					TOTALS				GRAND TOTAL	CONFIRMED MALIGNANCY	
	Initial	RA	RR	Total	CM	Initial	RA	RR	Total	CM	Initial	RA	RR	Total	CM	Initial	RA	RR	Total	CM	Initial	RA	RR	1973		1972	
Under 30	3 488	1 440	17	4 945	3	188	11	3	202	-	434	19	1	454	1	1 062	36	3	960	-	5 024	1 488	24	6 536	5	6	
30-39	1 779	1 618	8	3 405	8	108	22	-	130	-	317	24	5	346	-	539	56	3	548	-	2 693	1 720	16	4 429	10	3	
40-49	947	1 049	8	2 004	1	31	9	-	40	-	43	5	1	49	2	156	38	1	192	2	1 174	1 101	10	2 285	5	2	
50-59	506	553	7	1 066	3	8	-	-	8	-	1	-	-	1	-	26	5	1	32	-	541	558	8	1 107	3	3	
Over 60	210	132	3	345	2	1	1	-	2	-	1	-	-	1	-	10	4	1	15	-	222	137	4	363	2	2	
Not stated	336	235	1	572	-	23	3	-	26	-	64	5	-	69	-	70	10	-	80	-	493	253	1	747	-	-	
Totals	7 266	5 027	44	12 337	17	359	46	3	408	-	860	53	7	920	3	1 863	149	9	1 827	2	10 348	5 275	63	15 686	25	16	

RA = Repeat Annual
RR = Repeat Request
CM = Confirmed Malignancy

Initial Smears = 65,97%
Repeat Annual Smears = 33,63%
Repeat Request Smears = 0,40%
100,00%

Of the total attendances of 71 589, 17 479 cases were examined by Medical Officers compared with 16 886 patients in 1972.

Detailed records are kept of all patients and defaulters homevisited wherever possible but many, especially in the Bantu population, could not be traced.

The following table depicts attendances at the family planning clinics since their inception and the yearly percentage increase in attendances:-

Year	Attendances	Percentage Increase over previous year
1967	3 831	-
1968	13 744	-
1969	19 097	38,95%
1970	26 105	36,70%
1971	41 594	59,33%
1972	58 592	40,87%
1973	71 589	22,18%

(v) Cervical Exfoliative Cytology

Since 1963 the City Council has offered a free cervical exfoliative cytology service to Durban women through their private medical practitioners. This service was extended in 1971 to include selected patients attending the departmental family planning clinics. The microscopic examination is undertaken by the cytology unit of the Natal Provincial Hospital Laboratory Services at a fee of R1,50 per patient which charge is borne by the Durban City Council.

In addition to the above tests, smears were also taken at ante-natal clinics operated by this Department and these examined free of charge by the State Health Laboratory.

The total number of all cytology examinations, repeat examinations and the number of cases of malignancy confirmed are set out in the following table:-

Year	Total Examinations	Repeat Examinations	Confirmed Malignancy
1963	2 614	34	12
1964	2 915	324	18
1965	3 807	590	25
1966	4 754	611	26
1967	5 199	630	22
1968	5 785	718	15
1969	7 306	1 326	17
1970	8 192	2 738	16
1971	11 575	3 406	22
1972	15 599	4 524	16
1973	15 686	5 338	25
Total	83 432	20 239	214

A further analysis of the 1973 totals sets out initial, annual and repeat examinations according to age and race group.

Of the 25 confirmed cases of malignancy there were 22 cases of carcinoma-in-situ and three cases of carcinoma of the cervix.

B. FAMILY HEALTH

(i) Family Health Clinics

The family health clinics were held at 36 venues throughout the Municipal area during the year. The main functions are to advise and educate mothers with infants and pre-school children on all health aspects to maintain a satisfactory immunization state and generally advise on all health matters affecting the family.

The premises used for Whites were mainly hired for the purpose; two were transferred temporarily due to building alterations. There are six purpose-designed Municipal buildings in use: one in the central area for Whites and Coloureds; three in Chatsworth and one in Merebank for Indians; and one in the kwaMashu township for Africans.

Details of sessions and attendances at clinics are shown in the following tables:-

WHITE

Clinic Venue	Sessions	Attendances
Bellair	25	937
Brighton Beach	48	1 504
Cunningham Road	12	314
Durban North (2)	49	2 552
Fynnlands	49	4 042
Greyville	49	4 687
Hillary	25	1 073
Mayville	47	1 324
Montclair	50	4 532
Morningside	49	3 108
Old Fort Place	65	1 681
Overport	97	4 639
Point	48	4 637
Red Hill	27	852
Sea View	48	1 775
Warwick Avenue	198	11 410
Wentworth	50	2 694
Woodlands	49	2 702
Total 1973	985	54 463
Total 1972	1 012	58 757

The Warwick Avenue clinic, centrally situated, operated on five days a week and served four districts. The other venues were used once or twice weekly according to the need.

COLOURED

Clinic Venue	Sessions	Attendances
Austerville	147	14 670
Mayville	50	6 445
Red Hill	51	5 261
Sparks Estate	197	12 403
Warwick Avenue	99	5 655
Wentworth Government Village	48	8 795
Total 1973	592	53 229
Total 1972	596	54 510

A purpose-designed clinic is planned for the Wentworth/Austerville area and whereas it was hoped to occupy this clinic early in 1974 this date is now likely to be late 1974. The present accommodation is most unsuitable and overcrowded and extra sessions have not relieved the congestion.

BANTU

Clinic Venue	Sessions	Attendances
Chesterville	196	19 980
Goodwin's Cottage, kwaMashu	291	37 142
Rydalvale, kwaMashu	388	77 376
Lamontville	385	35 215
Lancers Road	148	11 380
Total 1973	1 408	181 093
Total 1972	1 485	218 677

At the Newlands clinic, Bantu sessions held in conjunction with those for Indians, were discontinued as this community was resettled in other areas.

INDIAN

Clinic Venue	Sessions	Attendances
Asherville	97	13 276
Bayview, Chatsworth	237	47 041
Woodhurst, Chatsworth	273	33 367
Chatsworth Township Centre	254	67 014
Clairwood	200	15 907
Lancers Road	249	29 022
Mayville	102	6 871
Merebank	239	20 546
Newlands	140	14 828
Reservoir Hills	48	7 122
Total 1973	1 839	254 994
Total 1972	1 899	288 232

A purpose-designed clinic is planned for the Clare Estate area and will absorb the clinic held at Reservoir Hills which is overcrowded.

Summary

The total number of clinic sessions and attendances for all racial groups was as follows:-

Details	White	Coloured	Bantu	Indian	Total 1973	Total 1972
Clinic Sessions	985	592	1 408	1 839	4 824	4 992
Attendances	54 463	53 229	181 093	254 994	543 779	620 176
New Cases	2 947	1 765	9 127	11 023	24 862	27 239
Cases seen by doctor	2 869	3 391	1 323	1 651	9 234	19 163

Medical officers in the clinics became so fully occupied with family planning activities that only special cases seen by the Community Nurses were referred to them for attention.

(ii) Home Visiting

On receipt of birth notifications, mothers of all races, except those confined by private medical practitioners - (unless requested) - were visited as soon as possible after discharge from hospital. Other home visits were made when necessary to defaulters from immunization and family planning clinics as well as for general problems of infant care, physical and mental health, and routine follow-up. Geriatric visits were also made.

Following requests by the Durban Child Welfare Society, a total of 93 visits were made to White and Coloured protected infants and cases of alleged neglect or those requiring health investigations. The Bantu Child Welfare Society was notified of the health and home conditions of foster-children.

In the chart of home visits, miscellaneous visits include cases of neglect, protected infants, antenatal cases, handicapped children, geriatrics, kwashiorkor investigations, measles deaths investigations, and many other varied reasons.

(iii) State Subsidised Skim Milk Powder Scheme

Distribution of the State-subsidised skim milk powder for the prevention of kwashiorkor continued, the vast majority of issues being from the non-white clinics. A total of 164 402 packets of 500 g each were issued, of which 9 967 packets were given free to indigent families.

HOME VISITING TO VARIOUS RACE GROUPS

YEAR: 1973

		I N V E S T I G A T I O N S												
Community	Number of Premises Visited	New Births (a)	Behaviour Problems (b)	Routine (c)	Family Planning (d)	Defaulters (d1)	Feeding Advice (e)	Illness (f)	Immuni- sation (g)	Mental Health (h)	Health Education+ (i)	Miscella- neous++ (j)	Wasted (k)	Total
		White Coloured Bantu Indian	10 394 4 634 11 962 13 297	2 081 1 478 5 077 7 719	80 - 28 6	2 137 852 951 126	325 910 2 804 1 547	14 57 415 2 046	1 140 184 716 379	868 93 554 59	850 1 335 2 784 652	89 38 43 10	6 6 10 5	
Total 1973	40 287	16 355	114	4 066	5 586	2 532	2 419	1 574	5 621	180	27	1 873	7 563	47 910
Total 1972	43 322	16 563	158	4 870	4 730	2 768	3 602	2 170	8 149	229	412	1 850	8 231	53 732

+ Health Education being constantly disseminated as an integral part of all home visits.
 ++ Miscellaneous included the following: neglect, protected infants, antenatal, handicapped, geriatrics, kwashiorkor, and any other category not listed.

The price of 5 cents per packet to families has remained static since the inception of the scheme in 1961, although the price of this commodity has been substantially increased. This will need review in the coming year. Difficulties in supply were experienced during the year and resulted in a reduced distribution compared with 1972.

(iv) Other Dietary Assistance

(a) Additional assistance was given by the Municipal Bantu Administration Department, namely:-

(1) varying amount of full cream dried milk issued free of charge to specially needy Bantu babies;

(2) fresh milk sold at 5 cents in varying amounts at the kwaMashu clinics.

(b) Other sources of food products were from:-

(1) the Malnutrition Relief Fund as follows:

full cream dried milk sold at 15 cents per 500 gm packet in limited supply for selected cases ;

a pre-cooked cereal sold at 5 cents per 500 gm packet.

In all, 11 016 500 gm packets of full cream dried milk and 24 000 500 gm packets of ProNutro (12 000 kg ProNutro and 5 508 kg full cream dried milk) were supplied.

(2) Feed the Babies Fund. Supplies of dried skim milk powder and a pre-cooked cereal were given free of charge to cases selected by the Community Nurses in Lamontville and Chesterville. These cases are 'adopted' for this scheme by the public. Reports on progress and general health are submitted to this Fund.

(v) Kwashiorkor

From deaths under six years of age notified during the year, 12 were due to kwashiorkor made up of 11 Bantu and one Coloured. These deaths were investigated by the Community Nurses. Ten of the Bantu cases and the one Coloured were ex-City cases who had come from the rural areas. The remaining Bantu case was a local and had not attended clinic due to parental religious convictions.

Malnutrition

Deaths from malnutrition (including kwashiorkor) under five years of age are reflected below:-

Year	White	Coloured	Bantu	Indian	Total
1964	-	1	78	7	86
1965	-	-	72	3	75
1966	-	1	27	3	31
1967	-	3	19	5	27
1968	-	-	52	3	55
1969	-	-	45	-	45
1970	-	-	30	-	30
1971	-	1	38	1	40
1972	-	4	27	1	32
1973	-	1	11	-	12

(vi) Creches, Places of Care and Nursery Schools

Throughout the year, regular inspection of these institutions was carried out. Creches and places of care are registered with the Departments of Social Welfare, Bantu Administration, Indian and Coloured Affairs, and nursery schools with the Provincial Education Department. New institutions applying for registration are supplied with a departmental code of practice. Two new creches were opened for Whites, making a total of 32 in Durban. There is still apparently a great need for further facilities for children in the 2 - 5 year old age group and also for the 6 - 8 year old child after school who has both parents in employment. All places of care will be inspected for licences in 1974.

C. GENERALOld Age Homes

Under the Aged Persons Act No.81 of 1967, all homes for the aged are compelled to register with the Department of Social Welfare. Before registration any applications are referred to this Department. Inspections of numerous premises were made tentative to conversion; many were found to be unsuitable according to standards laid down under the Act. No new homes were established.

D. IMMUNIZATION

Facilities for the maintenance of an adequate immunization state of the population at risk are provided at the family health clinics free of charge, and

parents are reminded of immunization when their infants reach three months of age, by means of a routine post card, particulars having been taken from the birth notification. Immunization is also undertaken by two mobile vans in outlying areas for smallpox and poliomyelitis immunization. Poliomyelitis vaccine was in short supply from May so that this field programme was abandoned temporarily.

In addition to clinic immunizations, all schools are visited and a diphtheria-tetanus booster given in Class I and a further tetanus booster in Standard II. All children attending nursery schools and creches were also immunized with a diphtheria-tetanus booster by visiting school teams using a "Ped-O-Jet" apparatus. Children under three years of age received diphtheria-pertussis-tetanus vaccine.

Measles vaccine was administered to Bantu children only in 1972, and in 1973 this was extended to include all non-white children from $4\frac{1}{2}$ months to 18 months of age. A total of 9 666 doses were given to 1 236 Coloureds, 3 377 Bantu and 5 053 Indians.

The rubella vaccine campaign which commenced in October 1972 continued at White High schools, and is administered to all Standard 6 classes. A total of 3 180 girls were immunized.

No immunization was carried out without parental consent.

Cholera Vaccine

Cholera immunization of selected field personnel of this department likely to come in close contact with any suspect case was carried out. This was extended later in the year to include field staff of the City Engineer's Department whose work brings them in close contact with sewage. A total of 2 185 doses was given.

Vaccination against Smallpox

The number of vaccinations undertaken in 1973 is reflected in the following table:-

Vaccinations	White	Coloured	Bantu	Indian	Total 1973	Total 1972
Primary	3 109	1 953	5 732	12 067	22 861	26 033
Re- vaccinations	285	57	3 177	233	3 752	948
Total	3 394	2 010	8 909	12 300	26 613	26 981

This figure excludes vaccinations undertaken by private practitioners, the Port Health Officer or the Bantu Administration Department.

Combined Diphtheria, Tetanus, Pertussis Vaccine

This combined triple antigen is administered to children under three years of age:-

Age Group	DTP Dose	White	Coloured	Bantu	Indian	Total
Under 1 Year	1st	2 732	1 666	6 205	9 387	19 990
	2nd	2 579	1 577	3 994	8 599	16 749
	3rd	2 309	1 432	2 748	7 525	14 014
	Total	7 620	4 675	12 947	25 511	50 743
1-3 Years	1st	113	93	782	480	1 468
	2nd	85	117	635	393	1 230
	3rd	126	184	710	584	1 604
	Booster	1 929	1 186	1 198	7 091	11 404
	Total	2 253	1 580	3 325	8 548	15 706
Grand Total		9 873	6 255	16 272	34 059	66 459

The total for 1972 was 71 498.

Combined Diphtheria and Tetanus Vaccine

This combined antigen is administered to children over three years of age at clinics, creches and nursery schools and as a booster to 6 - 7 year old school children. Details are summarised as follows:-

Age Group	DT Dose	White	Coloured	Bantu	Indian	Total
Under 1 Year	1st	12	8	14	4	38
	2nd	24	3	2	5	34
	3rd	23	-	2	3	28
Total		59	11	18	12	100
1-6 Years	1st	54	114	439	780	1 387
	2nd	38	68	299	538	943
	3rd	41	77	225	361	704
	Booster	525	306	513	567	1 911
Total		658	565	1 476	2 246	4 945
School Age	1st	51	39	103	267	460
	2nd	24	43	34	85	186
	3rd	10	27	27	66	130
	Booster	1 850	1 298	2 338	9 280	14 766
Total		1 935	1 407	2 502	9 698	15 542
Adults	1st	2	-	-	3	5
	2nd	1	-	1	-	2
	3rd	1	-	-	-	1
	Booster	3	-	-	-	3
Total		7	-	1	3	11
Grand Total		2 659	1 983	3 997	11 959	20 598

The total for 1972 was 41 425.

Tetanus Immunization

Tetanus vaccine was administered mainly to school children as shown in the following table:-

Age Group	Dose	White	Coloured	Bantu	Indian	Total
School Age	1st	13	23	-	27	63
	2nd	7	9	-	9	25
	3rd	-	2	-	-	2
	Booster	1 620	1 142	2 220	8 937	13 919
	Total	1 640	1 176	2 220	8 973	14 009
Adults	1st	50	1	-	-	51
	2nd	30	-	-	-	30
	3rd	10	-	-	1	11
	Booster	23	-	-	6	29
	Total	113	1	-	7	121
Grand Total		1 753	1 177	2 220	8 980	14 130

The total for 1972 was 10 224

Immunization against Poliomyelitis

Details of poliomyelitis doses given are tabulated below:-

Age Group	Dose	White	Coloured	Bantu	Indian	Total
Under 1 Year	1st	3 019	1 646	6 235	9 249	20 149
	2nd	2 810	1 451	4 138	8 201	16 600
	3rd	2 356	1 286	2 734	7 111	13 487
	Total	8 185	4 383	13 107	24 561	50 236
1-4 Years	1st	260	195	1 513	1 084	3 052
	2nd	195	218	1 372	954	2 739
	3rd	281	258	1 421	1 398	3 358
	Total	736	671	4 306	3 436	9 149
5-9 Years	1st	129	48	1 893	479	2 549
	2nd	77	34	276	193	580
	3rd	66	44	525	490	1 125
	Total	272	126	2 694	1 162	4 254
10-19 Years	1st	96	106	7	101	310
	2nd	68	42	3	76	189
	3rd	52	14	2	756	824
	Total	216	162	12	933	1 323
20 years & over	1st	265	6	410	9	690
	2nd	202	1	43	11	257
	3rd	170	16	26	789	1 001
	Total	637	23	479	809	1 948
Grand Total		10 046	5 365	20 598	30 901	66 910

The total for 1972 was 118 252. The large decrease in 1973 was due to vaccine shortages and the consequent abandonment of field immunization.

A blood survey from fully immunized pre-school children showed that among the Bantu 23% and amongst the Indian community 19% of the children were inadequately protected against Type I virus. No protection against all three types of the virus was 4% and 1% for the two communities respectively. The respective figures for whites were lower. It is of interest to note that in a survey in Glasgow, 54% of children with a history of immunization lacked triple immunity. Further study and investigation would indeed prove interesting and of value and indicate whether socio-economic conditions, prevalence of entero-virus and degree of natural spread of the vaccine virus play an important role or not. Unfortunately the lack of staff and pressure in ensuring full and proper administration of the vaccine, quite apart from the many other duties in the Department, preclude spending time on research.

Typhoid Control

Clinics were held twice weekly throughout the year for Vi-tests on selected foodhandlers and for the administration of typhoid, paratyphoid A and B vaccine, as reflected in the following table=

Vi-tests	White	Coloured	Bantu	Indian	Total
Blood samples	1	-	644	34	679

The total for 1972 was 625.

TAB Vaccine	White	Coloured	Bantu	Indian	Total
1st dose	131	1	645	89	866
2nd dose	84	-	537	67	688
3rd dose	58	-	-	21	79
Booster	22	-	539	33	594
Total	295	1	1 721	210	2 227

The total for 1972 was 2 787.

The above figures include inhabitants of the Newlands area which was incorporated into Durban in 1969.

VII. HEALTH EDUCATIONINTRODUCTION

The staff complement in this section remained at 21, including the White male Health Educator who directs the section and a White Health Visitor or Community Nurse who assists in this duty.

Education was directed at groups in schools, gatherings in halls etc., from mobile vans and by house-to-house visiting. Methods of health education employed were, as usual, varied depending upon the particular needs of the situation, and included films and slide shows, working models, diagrams and photographs.

During the first half of the year a concentrated 2 1/2 month family planning programme was instituted among the Bantu community. This meant that most of the Bantu staff were wholly occupied on this subject, and in addition to their activities in the field, use was also made of press and radio. A 'spot' advert placed by the Natal Family Planning Association was heard in Municipal buses and was well received. The Bantu women are becoming more receptive to family planning, but the remark is often heard that their opposite sex is badly in need of education in this sphere.

The work performed during the year is summarised below.

WHITE COMMUNITY(a) Departmental Auditorium

On five occasions members of a Municipal social club and their friends viewed films covering the subjects of road safety, respiratory and cardiac resuscitation, mental health and environmental pollution.

Members of the St. John's Ambulance Brigade and Red Cross Society attended lectures on two occasions on the subject "Birth of a Baby", the lecture being supported by slides and visual aids.

Members of the South African Police spent one afternoon viewing films on the drug problem and this proved at least a small opportunity of reciprocating the assistance always so readily forthcoming from the Durban Drug Squad.

Sisters attending the Natal College for Advanced Technical Education undergoing training for the Public Health Diploma, viewed films on the art of successful instruction and attended a talk on health education. In addition, they spent two days in the section for practical instruction. Matrons and nursing sisters from various hospitals in Natal, studying for the Diploma in Nursing Administration, also spent time in the Department. After a talk and discussion on health education they visited the administration section and child health, antenatal and family planning clinics.

Post graduate nursing students from the University visited the Department, and after viewing a slide presentation covering the activities of the Department went to the venereal disease clinic and observed a lecturer giving a talk on venereal disease to suspects and cases. They also stopped at a milk pasteurising and distributing centre where a talk on milk hygiene was in progress.

Students from a college spent an afternoon in the Department where the principles of preventive medicine and the activities of a public health department were discussed, the talk and discussion being supported by slides. In addition, the milk laboratory was visited and a demonstration and talk given on insect pests and rodents and their control.

Members of the Institute of Water Pollution Control and interested staff from the City Engineer's and City Health Departments visited the auditorium on five occasions for talks with slide and film shows covering the subjects of utilisation of water, the origin and purification of water supplies, certain aspects of activated sludge treatment and the pros and cons of various sewage purification plants.

On two occasions members of the Natal Students' Society viewed films on Road Safety, supported by a lecture and a slide presentation on the purification of waste waters with emphasis on the cost aspect.

Members of the City Engineer's and City Health staff and of other local authorities, attended lectures and discussion groups under the auspices of the National Building Research Institute on five different occasions on matters relative to the building industry and building practice regarding costs, modern methods, modern accounting, building information, materials, principles and concepts.

A group of parents and mothers gathered together by the Durban Child Welfare Society were shown films on alcoholism, whilst mothers awaiting attention at departmental clinics viewed films on immunization, nutrition, resuscitation and child care.

On 12 occasions staff of the Department attended films on mastitis; the first days of life; nutrition; hygiene; margarine production; modern operating theatre techniques; building methods for the disabled; road accidents; environmental pollution; mental health; population explosion; epilepsy and forensic medicine.

The auditorium was also used on occasions in conjunction with specialist groups from overseas. On two occasions visiting doctors, one group of 25 from the Viennese Medical Academy, and the other of about the same size from the Bavarian Medical Association attended a seminar in the auditorium on the subject of public health and the role of the local authority in this country. A further group of local people having an interest in the drug problem assembled for an address by Dr. Richard Phillipson of the American State Health Services who lectured on mental health in relation to the drug problem.

(b) Other Venues

Five schools were visited. At three high schools films on environmental pollution were shown, whilst a talk and film on the subject of adolescence and 'growing up' was given to girls. At two junior schools films on cleanliness; general hygiene; nutrition and pollution were shown. All films were followed by a question and answer period.

Student nurses at two training hospitals were visited on 14 occasions when film and slide presentations were shown as part of their in-service training. The subjects included the activities of the Department; environmental pollution; the housefly; the rat; cigarette smoking; alcoholism; tuberculosis; rabies and bilharzia.

Scout groups were visited on two occasions and films shown on the subjects of bilharzia; malaria; typhoid fever and drugs; all films were followed by a discussion period.

Films on drugs; pollution; the litter problem, and bilharzia were shown to two Women's Institute groups; whilst the subject of drugs formed the topic

for a film show and discussion at a church gathering. At a further meeting of the same group, films on the are of resuscitation by the mouth-to-mouth and mouth-to-nose methods were shown.

Films on immunization and general hygiene were shown to a group of flat dwellers, whilst a group of expectant mothers and newlyweds were shown a film on the birth of a baby.

Three groups of teenage girls were gathered together by parents and a film and talk on the subject of 'growing up' and motherhood given.

COLOURED COMMUNITY

During the year the work carried out by the Coloured female lecturer consisted of film shows, slide presentations, talks to pre-arranged groups and house-to-house visits. The major part of this work was carried out in the Wentworth area, amongst the lower income group.

Film Shows and Slide Presentations

Film shows have been given at schools, in factories and large stores, a total of 48 shows being given in all. Subjects covered were cleanliness; the louse; drugs and alcoholism; nutrition; child care; 'growing up' for girls; and last but not least the important subject of family planning.

Slide presentations and talks have been given to groups awaiting attention at departmental clinics, a total of 88 such presentations on venereal disease; immunization; and tuberculosis having been given.

Group Talks

The clinics were also the venue for group talks using other visual aids, such as posters and charts. A total of 1 275 talks were delivered and all clinics visited, the subjects of such talks included child care, nutrition, baby feeding, personal hygiene, immunization, tuberculosis, venereal disease and family planning.

A total of 573 house-to-house visits were also carried out where considered necessary for specific reasons. At these visits which covered all areas where Coloureds reside, the subjects of antenatal care, child care, nits, lice, personal cleanliness, and family planning were discussed in a more informal manner.

BANTU COMMUNITY

Work amongst this community continued throughout the year with much enthusiasm using the well proved methods of film shows, talks from a mobile loudspeaker van, group talks and discussions. House to house visits, where necessary, were carried out. A special programme was introduced during the year entitled "Healthy Living" but could equally as well have been called "Responsible Parenthood." Included in this talk were all the necessary requirements for a healthy and happy family, namely, general and personal hygiene, nutrition, wise spending, child care, and family planning. A film depicting two Bantu families was used in support of the talks, entitled "Two Families", and portrayed the opposites of happiness and misery.

Film Shows and Slide Presentations

Film shows were shown in community halls in the townships and at hostels and locations, as well as in hotels, shops, factories and hospitals. All films were preceded by a short introduction to the subject and followed by a talk and discussion. A total of 357 shows were given in all, covering foodhandling hygiene, family planning, nutrition, disease and healthy living.

Slide transparencies used as visual aids for the purpose of lectures were used more frequently this year at clinics, schools, youth clubs, Bantu Administration Influx Control Office, hotels and to women's groups in the townships. The two main subjects covered were tuberculosis and family planning but other subjects such as venereal disease, milk handling, and immunization were also included, a total of 714 talks being given.

Talks from Loudspeaker Van

Talks from the loudspeaker van continued to be a popular and highly acceptable form of transmitting health education, always attracting large audiences often from considerable distances. It is seldom that less than 100 persons listen to these talks of which 1 155 were given in the townships, hostels and locations. The subjects covered in this way were tuberculosis, nutrition, litter and hygiene, foodhandling, immunization and healthy living.

Group Talks

Group talks formed the major part of the programme although of no more or less importance than other methods. People were called together in the townships by means of loud-hailers or by visiting three or four adjacent houses. The small groups thus formed, from 12 to 50 or so then received a talk by the roadside and in the shade of a tree. These informal talks are very



A POSTER USED IN A RECENT ANTI-LITTER CAMPAIGN

popular and result in many questions being asked. Groups are also easily formed at clinics, compounds, hostels, from those awaiting attention at Bantu Administration offices and those in the rest rooms between shifts at the Transport Department.

A larger number of subjects can be explained in this way and during the year a total of 5 534 talks were given at Lamontville, kwaMashu, Chesterville, Umlazi Glebe, clinics, hostels, compounds, rest rooms and at the Bantu Administration Department. The subjects covered included cholera, tuberculosis, venereal disease, immunization, nutrition, foodhandling hygiene, litter and hygiene, family planning, child care and healthy living.

House-to-House Visiting

House-to-house visiting is a way of getting to know the people better and probably the best way of discussing the personal aspect of subjects such as family planning. House-to-house visiting was also extended to domestic servants and those working and residing in the city areas. In all a total of 2 966 visits were made in the townships and city to discuss family planning, child care, tuberculosis and health living.

INDIAN COMMUNITY

Work amongst this community was carried out with the use of films and talks, talks from the loudspeaker van, group talks and house-to-house visiting. Films are extremely popular but suitable venues are scarce as there is a paucity of community and other halls. However, churches have been used when possible and films can always be shown at schools. The Department was also able to find a cinema hall attached to an hotel in Merebank and was very grateful for the co-operation of the owner.

Film Shows and Slide Presentations

Film shows were carried out in schools as well as to adult groups in Chatsworth and Merebank. A total of 57 shows were presented on resuscitation, tuberculosis, alcoholism, foodhandling hygiene, cleanliness, nutrition, and drugs.

Slide presentations with talks again proved very popular particularly at schools, in factories and at clinics. Owing to the louse problem amongst the children a new slide series was created on this subject and shown throughout 16 schools during the year. This series was also shown to parents where hall accommodation was kindly provided at the school. A total of 434 talks were given in all and although the subject of nits and lice formed the major part, a series on tuberculosis, immunization and venereal disease were shown at clinics.

Talks from the Loudspeaker Van

Talks from the van were given in all areas where Indians reside, the majority of these talks being given in the more densely populated areas. Subjects dealt with were of a more general nature, such as immunization and hygiene including the litter problem; in all 1 370 talks were delivered.

Group Talks

Group talks were used at clinics and factories. Unlike the Bantu community, it is not easy to gather groups together in their residential areas as this community does not favour leaving home and collecting in a crowd in the street. Groups are, however, brought together at schools or churches, but in such cases a film show is usually arranged. A total number of 1 393 group talks were presented; the subjects dealt with included family planning, child care, personal hygiene, tuberculosis, nutrition and nits and lice.

House-to-House Visits

House-to-house visiting was carried out in all areas including flats in the city area. This method of health education proved to be the most popular with this group and the personal family discussions were very effective. Often one finds more than one family at each address thus making the visit all the more effective.

Talks most frequently given dealt with general hygiene and all aspects of personal and home cleanliness including litter, nits and lice, all aspects of child care and family planning. The talks numbered 8 475.

GENERAL

Indian and Coloured students of the M.L. Sultan Technical College undergoing training for the Public Health Diploma, spent three days in the section for practical training and a study of health education methods.

Non-White medical students visited the Departmental milk laboratory to discuss milk control. Health education techniques, films on drugs and alcoholism and the slide series depicting the functions of the Department were shown.

Second-year Social Science students from the Durban/Westville University were visited on several occasions and discussions on drugs, alcoholism, family planning and nutrition introduced. Third-year Social Science students who formed groups in the housing estates as part of their practical training were assisted with talks on various health matters.

VIII. HEALTH INSPECTION

INTRODUCTION

The shortage of White health inspectors continued and with the City's industrial, commercial and residential growth the reduced staff was extremely hard pressed to keep up with the ever-increasing demands of the City.

To anticipate and meet the situation this Department embarked some years ago on a scheme to train its own health inspectors as the national shortage is such that all municipalities are aware of the value of these personnel and consequently offer an attractive variety of fringe benefits to fill their ranks.

However, the process of training takes time and there is a tremendous turnover of learner health inspectors in the interim. Of those qualifying many leave for the reasons given above.

Changes in the establishment were effected whereby certain "unqualified" personnel were upgraded and the number of posts increased by four Whites and 14 Non-Whites resulting in a total of 25 persons being employed in work which would relieve health inspectors of as much routine as possible in regard to the investigation of minor complaints, particularly those relating to pests and back yard inspectional work. The labour force was also increased by 24 labourers and two Non-White overseers for anti-malaria work.

During the year the Municipality suffered a labour strike, but this Department's normal labour strength reported for duty throughout the period of the disturbance. Only in one instance did work stop completely and this was considered to be due to intimidation from outside sources.

Never the less a high standard has been maintained throughout the City and all emergencies have been met. However, the constant pressure cannot be maintained indefinitely without some deleterious effect on those concerned.

COMPLAINTS

The Department received 2 805 (2 956) complaints during the year (excluding those respecting pests), which are analysed as follows :-

Animal Keeping	18 (25)	Refuse dumping	363 (386)
Conservancy Services	33 (40)	Refuse removals	28 (45)
Drainage - appurtenances	56 (69)	Sanitary	
- defects	299 (384)	accommodation	116 (92)
Food - unhygienic		Shacks (Illegal)	16 (12)
handling	37 (34)	Smoke/Air pollu-	
- unsound	40 (50)	tion	8 (5)
Housing - illegal	17 (20)	Structural	
- overcrowding	30 (40)	defects	134 (123)
Miscellaneous	74 (61)	Uncleanliness of	
Offensive smells	198 (233)	premises	519 (529)
Poultry keeping	55 (71)	Vacant land	757 (733)
		Ventilation	7 (4)

All these reported nuisances were promptly investigated and appropriate action taken.

INSPECTIONS

Visits carried out to all classes of premises by the health inspectorate and ancilliary personnel are summarised hereunder:-

<u>Food Handling Premises</u>		<u>Other Premises</u>	
Bakeries	470	Barracks/Compounds	1 578
Boarding Houses/ Private Hotels	1 011	Dwellings	92 277
Butcheries	3 647	General Dealers	4 390
Dairies (mainly ex- City and depots)	4 433	Hairdressers	1 030
Food Manufactories	797	Laundries/Dry Cleaners and Depots	920
General/Fresh Produce Dealers	12 810	Lodging Houses/Flats	9 641
Hotels (liquor- licensed)	1 279	Offensive Trades	695
Milk Bars	8	Sundry - trading	11 464
Offensive Trades	97	- non-trading	40 729
Restaurants/Eating Houses	7 916		
Tea Rooms	2 028		
Sundry	2 975		

Arising from these inspections, which totalled 200 195 (191 047) the following action was taken:-

Personal notices issued at time of inspection	13 868
Statutory notices served	3 232
Letters written	1 372
Prosecutions instituted (counts)	167

LICENSING/REGISTRATION(a) Trade Licence Applications

Reports on public health implications respecting the state of premises and trades to be conducted therein were submitted in connection with 2 816 new applications lodged with the City Licensing Officer. In certain instances there were departmental requirements or bylaw shortcomings to be complied with necessitating re-inspection in due course. As a result, 987 "further reports" were submitted.

(b) Bantu Licence Applications (Housing)

During the current year, the Director of Bantu Administration referred two applications for permission to house Bantu non-domestics in terms of the Regulations under the Bantu (Urban Areas) Consolidation Act No.25 of 1945. The conditions were satisfactory and favourable reports were made.

(c) Animal Keepers

Twenty-three permits for the keeping of animals were issued in terms of the Public Health Bylaws, 22 being renewals and one being a new permit. The total number of animals registered was:

Bovines	2	Goats	40
Dogs	223+	Pigs	500
Equines	532	Sheep	15

+ Accommodated for reward, being the property of some other person.

(d) Food Vending Machines/Vehicles

Registration under the Food Bylaws was granted for the following:-

(i)	mobile soft dairy mix dispensers	26
(ii)	soft serve machines	60
(iii)	hawkers' and pedlars' vehicles	121

(e) Modification of Food Bylaw Requirements

In accordance with powers contained in the Food Bylaws, the City Medical Officer of Health granted 30 certificates authorising the relaxation of minimum requirements, mainly respecting storage areas (27).

(f) Drycleaners/Laundry Vehicles

The Department approved the suitability of two vans during the year.

(g) Mattress Makers/Upholsterers

Fifty four certificates in terms of the Mattress Makers and Upholsterers Regulations were issued, 48 being renewals and eight being in respect of new trade licences.

(h) Offensive Trades

The number of trades registered amounted to 129 of which 64 were operating under unlimited time periods and 65 were for a restricted term. The latter figure included six new applications, viz.:

Refuse depositing site	1
Petrol refining works products.....	1
Chemical works.....	2
Processing products from petroleum refining....	2

(i) Fumigators

Fifteen certificates were issued regarding new applications.

ENVIRONMENTAL SANITATIONSwimming Baths

Samples of water from all swimming pools used by the public were submitted to the Department's laboratory for bacteriological examination, when the residual chlorine content of the water was also checked.

Resulting from these tests it was necessary to advise certain institutions that their pool did not conform to the standards of the bylaws and that prompt attention to the matter was required.

Bantu Beach

The increased patronage of this beach necessitated the construction of new toilet and change room facilities.

Public Conveniences

One new public convenience for Non-Whites was commissioned during the year, being situated in Verbena Road.

Sewerage

Three new incinerators have recently been installed at the City Engineer's Southern Sewerage Works to deal with industrial waste, sewer screenings and other materials requiring destruction. Although due for commissioning during the year, owing to sundry technical hitches, these have not yet become fully operational and occasionally all were out of commission simultaneously.

Because of this, screenings from the sewer inlet were deposited on vacant land in the vicinity, giving rise to heavy fly breeding which affected nearby residential areas. Also, sludge presses in the plant became defective and the sludge was pumped on to temporary drying beds and then dumped on the same land. Although this sludge had already been treated in digestors at temperatures in excess of 150°C, and was considered sterile, it never the less proved attractive to flies.

Arising from numerous sewage surcharges in Peter Road, Sea Cow Lake, the City Engineer commissioned a pump station so that the bulk of the effluent from Parlock Township and the Peter Road vicinity was pumped to the Northern Sewage Works and this will eventually permit the closing down of the Parlock Sewage Works.

A section of the main trunk sewer in Prospect Hall Road near the Japanese Gardens, Durban North, was completed so enabling numerous houses in the area to be connected. A large stormwater main was also laid which reduced the mosquito complaints from residents in the locality.

Natal College for Advanced Technical Education

A large area adjacent to Old Dutch Road has been acquired for the purpose of re-establishing the College. Within this area are 226 residential and business premises which had deteriorated to slum type accommodation in many instances. Work has already commenced on converting a block of flats to classrooms.

Transient Sub-economic Housing

Accommodation provided by the City Council for Indian families able only to afford this type of housing presented the Department with several problems as ablution and toilet facilities were provided on a communal basis; despite the efforts of a resident supervisor, these amenities were frequently misused and damaged.

No washing up facilities were provided in the housing units, resulting in cooking utensil waste water and food/scraps being thrown on the ground adjacent to the buildings, attracting both flies and rats.

The surrounds were neither hardened nor drained with the result that wind and rain erosion occurred.

These matters are being given attention but a lesson has been learned that communal facilities are not practical in this type of housing.

The basic problem is, of course, to produce housing with various amenities yet within the financial means of the occupants, a task requiring financial and building wizardry.

Dam Water

Since about the turn of the century, long before the area was incorporated into Durban, a factory at Merebank has been drawing water from a private dam for cooling purposes and in recent years the same water has been utilised for dilution of molasses prior to fermentation and distillation. Although the water is of an adequate standard of purity, periodic sewer surcharges from other sources in the collecting area have given rise to pollution of the water. Rather than draw additional water from the Municipal supply, the company undertook to install a chlorination plant in order to maintain the dam water at the required standard at all times.

Offensive Smells

Numerous complaints spread over a wide area were received regarding offensive smells from the Abattoir. This matter was taken up directly with the Abattoir Commission Headquarters in Pretoria and a new digester plant was installed which after various "teething" troubles worked satisfactorily.

Oil Pollution

During the year pollution of the beaches was investigated by this Department when patches of oil varying in length from approximately 100 metres to over a kilometre came ashore. No evidence of fish or bird mortality was noted and, as far as possible, all fouling was collected and removed by the City Engineer's Department.

Mortuary Facilities

For many years this Department has pressed local undertakers to provide facilities for the temporary retention of corpses but has met with strong resistance particularly from members of the Indian community who have always claimed that the funeral procedure is completed within 24 hours of death.

However, a local Indian concern installed a cold room at the Cato Manor Indian Crematorium capable of accommodating eight corpses, thus supporting this Department's contention that this is an essential facility. Under local climatic conditions arguments to keeping bodies in dwellings pending the funerals cannot be sustained.

Refuse Tip Sites

Towards the end of this year certain improvements were effected to the Municipal industrial tip site at Lamont following adverse reports by this Department as well as several fires creating dense palls of smoke which affected traffic on the South Coast Road and also aircraft taking off and landing at Louis Botha Airport.

The amelioration includes better coverage with soil and together with a mechanical compactor on order should largely reduce nuisances. A further improvement was that the two kilometre stretch of road between South Coast Road and the tip site was macadamised thus encouraging the public to travel to the tip to dump.

During the year an international concern applied for and obtained permission in terms of the Offensive Trade Regulations to operate a sanitary landfill tip site on University of Natal property on the south side of Francois Road. To date the manner in which this industrial tip site has been conducted has proved satisfactory. The valley being used will ultimately provide ground for additional sporting facilities.

Scrap Vehicles

A campaign was undertaken to remove scrap motor vehicles from road verges and private property. The General Bylaws for the City have been amended to permit the removal of these vehicles by the City Council at the cost of the culprit, if traced. Some improvement has been achieved, but it has not yet been possible to implement the terms of the new Bylaw properly due to the lack of removal equipment and accommodation for the vehicles. A somewhat pessimistic view is taken of an easy solution to this problem which plagues most industrialised countries.

CHATSWORTH INDIAN TOWNSHIP

This large modern Indian housing scheme is nearing completion and is already accommodating a population in excess of 148 000 persons. The relevant health inspectorate, comprising a White Senior Health Inspector, five Indian Health Inspectors and ancilliary personnel, were fully occupied in dealing with various public health problems in the township, including the following :-

(a) Shopping Facilities

Lack of retail outlets in Units 1, 6, 7, 8, 9 and 11 has persisted since the scheme started and during the year there was no change in this regard. This shortfall of essential amenities has encouraged illegal trading in foodstuffs in private dwellings throughout these areas. Such under-cover activities are most difficult to control as there is a natural reluctance on the part of a major portion of the population to divulge information which could rebound to their detriment. There is, therefore, the difficulty of obtaining evidence to prove sale which is a legal pre-requisite when instituting proceedings under the Food Bylaws. Food premises distributed throughout these areas, in preference to the existing system of concentrated shopping complexes (as provided in Units 3, 9 and 5) would help to control the illegal trading.

With regard to Unit 9 food premises comprising, amongst other retail food trades an off-consumption restaurant, were erected on the Crossmore railway terminal station. Apart from a service to passengers, this proved convenient to Unit 9 residents and, to some degree, those of the new Unit 11 presently under development but again without shopping facilities apart from mobile hawkers.

(b) Hawking

Arising from the closure of the offal and fish stalls in the Indian Market in the centre of the City, checks were made to control improper hawking of these commodities in the Chatsworth area. Several such hawkers were apprehended and warned, and in two cases prosecutions were instituted for trading from unregistered vehicles.

(c) Market Stalls

During the year, the stalls attached to the State's Department of Community Development market complex in Unit 3 were opened to persons dealing in fruit and vegetables and non-edible ceremonial goods. To date 21 stalls have been occupied.

(d) Hotels

One liquor licence hotel, the Sol Namara, was completed in Silverglen during the year. This establishment has been built and equipped to a high standard, and the modern facilities promise that, with good management, these facilities will prove a credit to the Indian community.

Two other new hotels are presently under construction, one in Oak Avenue, Kharwastan and the other in Road 706, Neighbourhood Unit 7. Both will be licensed to sell liquor, and their completion will give Chatsworth a total of four such premises.

COMPLAINTS DEALT WITH DURING 1973

Drainage	20
Overgrowth.....	67
Rodents.....	14
Mosquitoes.....	33
Poultry.....	10
Overcrowding...	8
Refuse dumping.	35
Cimex.....	32
Total	<u>219</u>

TEMPORARY SEWERAGE WORKS

Following upon various complaints of odours, mosquito breeding and pollution of a stream flowing through the Stainbank Nature Reserve, and representations by this department, the City Engineer's Department installed a pumping unit to carry sewage from Unit 2 to the Southern Sewerage Works. This was completed and the nuisances consequently abated.

REFUSE BURNING

A complaint was investigated of the burning of refuse in the Stainbank Nature Reserve (ex-City) adjoining the Chatsworth boundary, and it transpired that it was in fact a tipping site serving the Yellowwood Park local authority. The person responsible was interviewed and signified his concern about the possible nuisance and was already investigating the feasibility of acquiring plant to compress and bury this material.

KWA MASHU BANTU TOWNSHIP

The A.J. Mnguni child crèche for 90 children was opened during the year under the administration of the Zamokule Women's Society at Unit M.

In Unit J there were 32 dwellings provided for disabled persons under the care of the Welfare Society. Each unit comprised two rooms and accommodated two persons per room.

A new beer garden was opened in Unit L and a beer hall depot in the Township Centre.

Two offal shops were opened in the Township Centre and a new butcher shop at M.1500.

FOOD HYGIENE

In terms of the Regulations relating to Food Inspection framed under the Public Health Act, 1919, as amended, quantities of produce were inspected and either seized by the Health Inspectorate or voluntarily surrendered by the owners. Daily inspections of produce arriving at the City Market together with requests by wholesalers and retailers for the examination of food-stuffs at their premises resulted in the greatest majority of condemnations and subsequent destruction as the following figures indicate:-

(a) City Market

11 318 bags	Cabbages, carrots, beans, peas, pumpkins, cucumbers, potatoes, green peppers, mealies, cauliflowers, chillies, squash, onions, marrows, mangoes and lemons.
6 525 lots	Grapes, tomatoes, mangoes, span-spek, lettuce, pears, guavas, brinjals, peaches, green peppers, apples, quinces, marrows, green beans, pineapples and apricots.

(b) Other Traders

91 462 lots	Fish, meat, jam, fruit, soup, vegetables, pickles, sauces, cereals, nuts, spaghetti, etc.
11 748 kg	Cheese, fish, salted snoek, ham, yeast, prawns and sugar.
2 643 boxes/ cartons	Cheese, macaroni, salted snoek, sweets.
1 080 dozen	Eggs.
1 010 packets	Chicken portions
167	Chickens.

The reasons for condemnation included "blown", rusted or leaking tins, broken or leaking bottles, weevil infested cereals, macaroni, etc., decomposition of frozen foodstuffs, and contamination by chemicals, together with natural deterioration of perishable foodstuffs.

In addition to the abovementioned, refrigeration breakdowns at supermarkets, shops, butcheries, and wholesalers resulted in the condemnation of the following for decomposition:-

2 687 packets	Frozen vegetables, fish, sausages, pastry, processed meats, chicken portions and crustacea.
4 961 kg	raw meat
1 300 kg	frozen vegetables, fish, processed meats, poultry.
330	chickens
23	ducks
667 l	ice cream

Food Sampling

(i) Chemical Analyses

In accordance with routine procedure under the Foodstuffs, Cosmetics and Disinfectants Act, 1972, or Regulations framed thereunder, 531 food samples were submitted for analysis by the State Chemical Laboratories in Pretoria. The following indicates the range of commodities sampled:-

Condiments/sauces	14	Meat - minced	70
Cooking oil	1	- polonies	5
Cordials/squashes	14	- processed	5
Curry/chilli powders	3	Boerewors/sausages	112
Fish preparations	3	Milk products -	
Jam/preserves	8	cream	25
Mayonnaise	2	ice cream	36
		milk	105
		Powders/various	
		food	10
		Vinegar	13

Of the aforesaid 531 (619) samples, 26 (15) were found to be unsatisfactory, viz:

Cheese whirl	1	Mustard	1
Cherries	1	Orange juice	3
Chocolate liquid	1	Paste, chilli	3
Fruit mincemeat	2	Salt	2
Marmalade	2	Sauces	4
Meat - minced	2	Syrup	1
- boerewors	1	Vinegar	2

Legal proceedings were instituted in 14 instances and fines to the sum of R495 imposed by the courts. Appropriate action in the form of advising other local authorities and Government departments was taken in respect of the other samples.

(ii) Bacteriological Examinations

It is a requirement of the Food Bylaws for the City of Durban that all ready-to-eat food-stuffs must comply with certain bacteriological standards. During the year, 44 samples were taken from food factories and restaurants and submitted for examination. Where the results did not conform to the required bacteriological standards the licensees were warned accordingly and advised to improve their food hygiene techniques. Appropriate action was taken in instances where no improvement was evident.

Regular sampling of crustacea arriving direct from Mocambique to Durban by road transport was undertaken for cholera examination. These were submitted to the local State Health Laboratory, all with negative result.

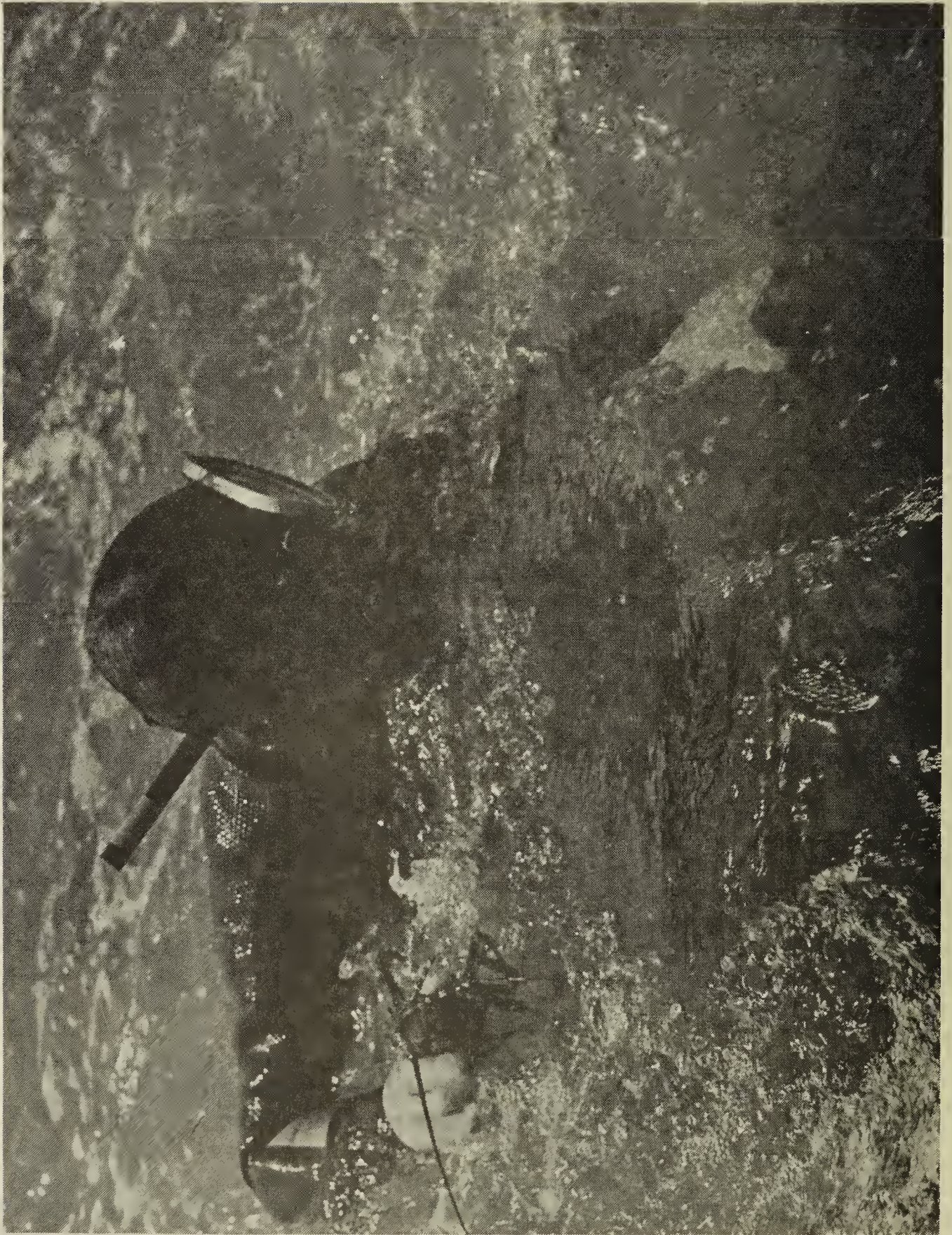
Water Sampling

Regular weekly check sampling of the Council's water supply was undertaken by the Department in all parts of the City for bacterial and chemical analysis. Simultaneously tests were carried out to ascertain the residual chlorine content. In general the water supply was found to be of a satisfactory standard.

Marine Sampling

The Department continued its programme of sampling crayfish and molluscs along the foreshore to determine the presence of faecal contamination. Although results have been reasonably satisfactory, the situation has not improved and there is the ever present danger of cholera being spread by carriers and the like aboard transient shipping in the outer anchorage awaiting berths in the harbour.

Local currents tend to wash discharges from both the harbour and outer anchorage onto parts of the foreshore which makes for a more vulnerable situation. In the circumstances, the closure of the area between the Umgeni River and Isipingo River to the taking of crayfish and oysters was again recommended to the Natal Parks, Game and Fish Preservation Board.



"ALL IN A DAY'S WORK" — MARINE SAMPLING BY A HEALTH INSPECTOR

Food Complaints

A number of complaints by members of the public involving foreign objects in foodstuffs were received. These included cockroaches in a carton of curry and in a sandwich; a glass splinter in a packet of health food; a fly embedded in a cheese; a piece of steel wire in a sweet; a worm in a tin of peas; and a burnt match in a carton of fruit salad.

A complaint was received from a housewife who, on opening a tin labelled "Unsweetened Diabetic Grapefruit Segments" found the contents to be sweetened fruit salad.

Appropriate action was taken in the above instances against the sellers or manufacturers concerned.

Acting on information received, an inspection of the cold rooms of a large hotel in the City resulted in the finding and detention of a quantity of unwholesome game meat. This meat, which had not been submitted to the Municipal Abattoir for inspection on its arrival in Durban was examined there when it was found to be totally unfit for human consumption and accordingly condemned. Appropriate action was taken against the hotel concerned.

Public Gatherings

At all public gatherings involving large numbers of people where food was prepared and dispensed, health officials were on duty. The most notable of these events was the Durban Turf Club's July Handicap which was attended by some 60 000 persons who consumed vast quantities of foodstuffs. Inspections were carried out prior to the meeting as well as on the day of the race. Food preparation, handling and dispensing in the 23 kiosks, five dining rooms and five tea rooms was found to be of a satisfactory hygienic standard.

During the holiday seasons, when thousands of country visitors occupy the beaches, regular inspections both in and out of normal working hours and over weekends were carried out of the beach-front restaurants to ensure that hygiene and hygienic practices did not deteriorate with the "rush" conditions.

Food Surveys

Particular attention is always paid by the inspectorate to premises involved in the manufacture, preparation or handling of food. In this regard, apart from inspections during normal working hours, early morning and evening inspections of hotel and restaurant kitchens were also made.

The results are summarised as follows:-

Establishment	Premises	Inspections	Notices Served
Butchers	253	2 354	365
Restaurants	457	3 495	745
Liquor licensed	127	672	186
Food factories	96	505	73
Boarding houses	190	797	144
Total	1 123	7 823	1 513

Indian Market

On the evening of 17th March, 1973, a fire ravaged the Indian Market, reducing most of this old tourist but unhygienic landmark to ashes, and destroying a large amount of foodstuffs stored therein. The meat, offal and food sections were relatively undamaged and on the morning following the fire all foodstuffs from these sections, after examination, were sold under strict health supervision before decomposition, due to lack of refrigeration, set in.

This Department was actively involved in the removal of foodstuffs damaged by fire in the market proper and considered unfit for human consumption. Strict anti-fly and rodent measures were carried out daily during the removal period.

After negotiations between the City Council, Indian stall holders and the Government had been concluded, it was agreed to erect a temporary market/bazaar on which work commenced during the latter part of the year.

Illegal Trading

Illegal trading in a number of localities in the City continued to flourish, particularly in the Victoria Street/Warwick Avenue complex where these activities were aggravated to a great extent by the destruction of the Indian Market, the closure of the Bantu Meat Market nearby and the temporary closure of the fish and offal stalls.

Illegal sale of foodstuffs ranged from fruit and vegetables to the sale of wet fish, offal and meat which included ready-to-eat varieties cooked on open fires adjacent to the closed markets.

Following much effort by the South African Police the amount of illegal and unhygienic offal selling in the Dalton Road area diminished, whilst the opening of a butchery in this area catering for the needs of Non-Whites contributed to the improvement. None the less the situation is still far from satisfactory.

Food Premises

Building operations in respect of the new restaurant which is adjacent to the Japanese Gardens were recommenced and trading started towards the end of the year on a restricted basis.

Following suggestions from this Department two canteens for firms' employees in the Maydon Wharf area were extensively renovated and now comply fully with food hygiene requirements.

BUILDING CONTROL

(a) Plans

During the period under review drawings totalling 5 014 (5 038) covering construction estimated to cost in excess of R94 million (R92 million) were received from the City Engineer's Department for scrutiny from a public health viewpoint and of these 1 855 (1 265) required reports. In addition, a further 495 (457) plans were returned to this Department for clearance/further report, thus a total of 5 509 (5 495) plans were dealt with altogether.

The "breakdown" of non-residential building plans is as follows:-

Non-Residential	Plans	Cost
		R
New commerce and industry	148	44 583 910
New State and municipal	9	-
Other	10	637 200
Additions to non-residential	981	11 077 316
Additions to State and municipal	28	30 000
Total	1 176	56 328 426

The details of residential building plans appear under Housing.

(b) Relaxation of Building Standards

In terms of Section 127 of the Building Bylaws the City Engineer may consent to the relaxation of certain standards of natural ventilation and lighting normally required in terms of Sections 126 and 129 of the Building Bylaws but before doing so requests comment on the public health implications. These applications, fully motivated by the applicants, required careful study and usually joint consultation with the parties concerned to ensure the incorporation of adequate safeguards.

During 1973 a total of 39 (36) such applications were received and acceptance of 34 of these was recommended, the remaining five being rejected for various reasons or referred back to the applicant for further information.

The above applications were in respect of such projects as lecture theatres, shops, offices, a bulk cash depot at a bank, a bakery, factories, a blast-proof control room at an oil refinery, restaurants, workshops, a prepared meat factory, operating theatres, a parking garage, computer rooms and photographic dark rooms. In some of these cases natural ventilation and lighting would obviously adversely affect the function performed, and in others the provision of natural means was considered either impractical or impossible for structural reasons.

(c) Building Bylaws Liaison

This Department continued its membership of the standing committee representative of the Natal Institute of Architects, the Master Builders Association and the National Building Research Institute, together

with affected municipal departments where such matters as fire protection, camping in caravan parks, arcade control, safety glazing, ventilation of domestic kitchens, street verandahs, control of septic tanks and open spaces were discussed and recommendations made to Council for either new or amended legislation in these matters.

Facilities for the Handicapped

It is satisfying to record that the designers of an hotel which was completed towards the end of 1973, and situated near the beach front, have made provision for handicapped residents in setting aside two rooms with the following features:-

- all doorways and passages are wide enough to permit the easy passage of a wheelchair;
- an enlarged bathroom/water closet is fitted with hand rails;
- bars and chains are provided above beds, bath and water closet;
- light fittings, radios, etc. can be installed on either side of the bed to suit the occupant's particular case.

These rooms are situated on that corner of the hotel affording the best view and the establishment has its own transport especially adapted to accommodate a wheelchair. Access to the rooms is via ramps to the lifts. This modern and enlightened attitude is commended and it is to be hoped will be emulated in developments elsewhere in the City.

Inspection of Buildings : Johannesburg

At the invitation of the Anglo American Corporation of South Africa Limited the City Medical Officer of Health, Chief Health Inspector, Senior Health Inspector (Building Control) and Health Inspector (Plans) visited the Carlton Centre, Johannesburg, and the Sandton City Centre on 28th November, 1973. Also present was a member of the City Engineer's Department as well as representatives of the Johannesburg Municipality.

The object of the visit was to see the type of development which the organisation contemplates in Durban and elsewhere, the problems they have encountered to date as well as good and poor examples of office and shop accommodation.

(d) Sectional Title:

Following the promulgation of the Sectional Titles Act in March, 1973, which provides for the division of buildings or parts thereof into "sections" for separate registered ownership, the first such application was received and dealt with in August. The premises concerned comprised a new block of flats which the applicants proposed to divide into eight sections. No objection was raised to the proposal.

(e) Mobile Homes:

This Department was requested by the South African Bureau of Standards to comment on the proposed specifications for this style of living accommodation but it was not favoured except possibly for strictly temporary purposes, as their dimensions and design do not conform to standards and requirements of the Bylaws or the provision of the Slums Act and consequently could give rise to health problems.

PEST CONTROL

Geographically and climatically Durban favours the multiplication of numerous insect and other pests, many of which are of medical importance as vectors of disease. It is therefore incumbent upon the Department to devote as much time, labour and expenditure as possible in controlling the proliferation of such pests. This work is performed by a trained staff and labour force comprising 175 Whites and Non-whites.

The Department is empowered to undertake anti-mosquito, fly rodent and other vermin measures on privately owned properties where owners or occupiers either fail to comply with the terms of a notice or authorise such measures to be undertaken. The control of cockroaches, flies, mosquitoes, bed bugs, clearance of overgrowth and the like on Municipal property is also the responsibility of the Department.

A high standard of work was maintained and in order to foster interest, periodic lectures were delivered to staff members on various aspects of their work.

It is the Department's policy to co-operate closely with such bodies as the manufacturers/distributors of pesticides particularly in regard to

testing the efficacy of newly marketed products with the South African Bureau of Standards; architects; the building trade; and other interested parties. This liaison gave rise to some interesting work and enlightening information during the year.

Mosquitoes

Complaints:

During the year, 945 complaints were investigated. An analysis of breeding foci is shown below:-

Miscellaneous containers	521	(487)
Obstructed stormwater drains	42	(52)
Other drains and sub-floor areas	29	(18)
Defective septic tanks/soak pits	43	(36)
Buildings under construction/ demolition	132	(87)
Natural swamps	22	(31)
Sanitary fitments	16	(10)
Undetermined	73	(68)
Unsubstantiated	67	(81)
	945	(870)

Mosquito breeding sources followed much the same pattern as in previous years although more widespread and aggravated by persons illegally dumping refuse on vacant properties further afield.

Heavy rains also caused the flooding of river banks into heavily overgrown terrain where mosquito breeding could not always be easily detected and remedial measures introduced before infestations reached formidable proportions. Fortunately, such breeding areas were not in the majority.

Mosquito development on construction and demolition sites continued to be a source of nuisance particularly during the builders' annual holiday recess in mid-summer. Co-operation of responsible persons was normally obtained to destroy breeding in such conditions, but this is a regular nuisance and one which is unlikely to be completely resolved.

The problem of mosquito breeding taking place in disused private swimming pools is not one of serious proportions although instances of this occurring were found on a few occasions.

Anti-Malaria Precautions

Following the discovery of *Anopheles funestus* breeding in the Newlands district in 1972, anti-mosquito measures were intensified throughout the City. Additional labour, comprising 24 Africans (later reduced to 22) and two African overseers, were employed for the purpose of maintaining natural streams in the Newlands area in a free-flowing condition. In this regard, 172 068 m of temporary drainage work was completed. This activity, with the use of a selective organophosphate larvicide, considerably reduced the incidence of the malaria vector in this area.

A total of 24 512 Anopheline larvae were collected and examined in the Department's laboratory during the year. The breeding out of *A. funestus* to adult stage in cages in the colder months still proved most difficult in spite of improvised 'incubators'. However, during the warmer periods a fair degree of success was obtained.

In accordance with the latest available identification 'keys' the following *Anopheles* species were detected:-

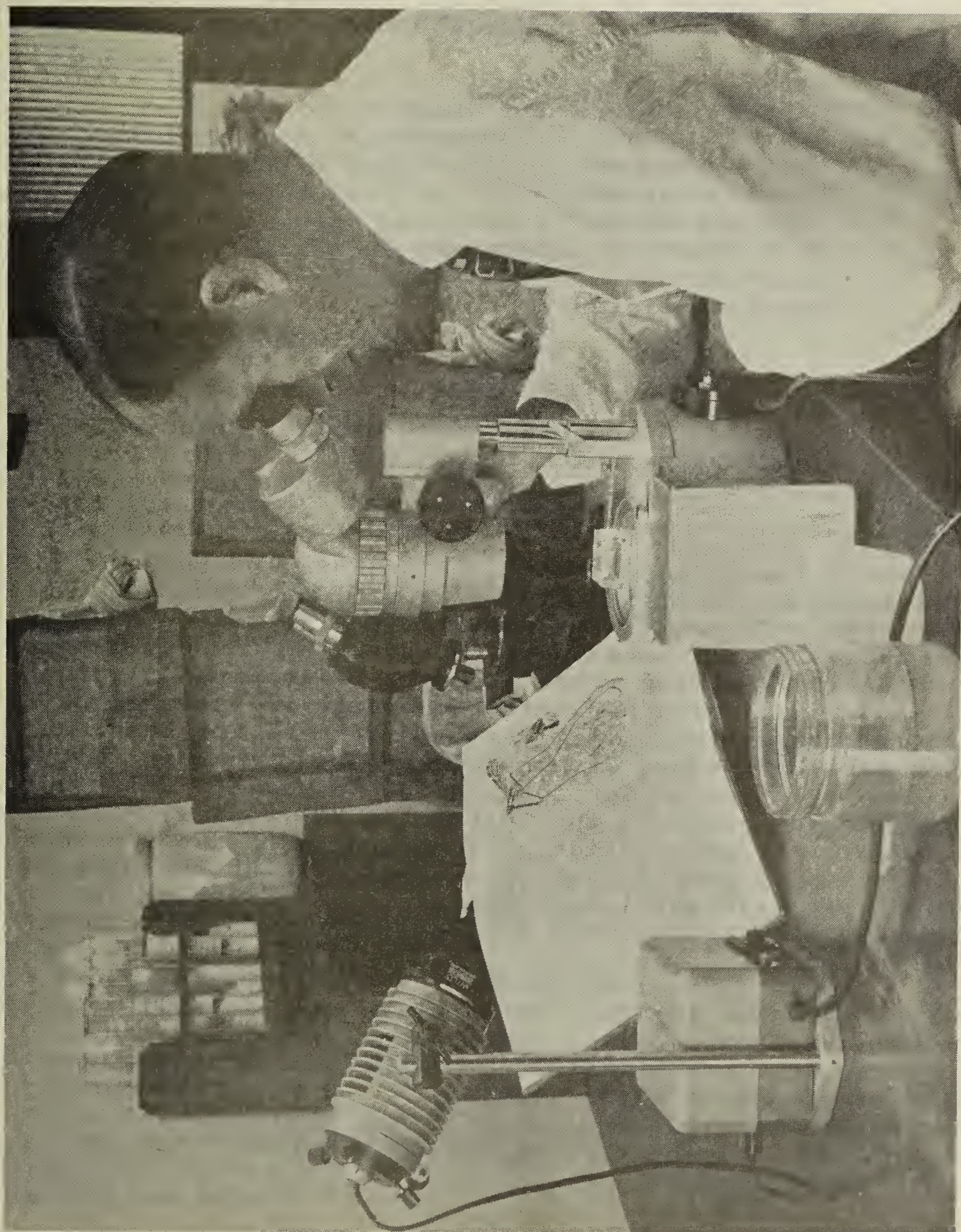
Mosquito Larvae

<i>gambiae</i>	Nil	(nil)	<i>longipalpis</i>	Nil	(132)
<i>funestus</i>	73	(359)	<i>marshalli</i>	44	(175)
<i>leesoni</i>	316	(248)	<i>natalensis</i>	68	(469)
<i>ardensis</i>	7	(4)	<i>pretoriensis</i>	15	(2 179)
<i>cinereus</i>	29	(176)	<i>listeri</i>	Nil	(3)
<i>de meilloni</i>	12 220	(10 890)	<i>maculipalpis</i>	Nil	(17)
<i>coustani</i>	11 657	(10 525)	<i>rufipes</i>	2	(Nil)

Mosquito control measures also included the building of "pit shelters" for retrieving adult anopheles. Although various species were obtained in this manner no vectors of malaria were recovered. Other measures included the "ditching" of 475 515 m of stormwater furrows and natural streams in Newlands, whilst 2 720 litres of larvicide were utilised for destroying mosquito breeding where biological methods were impractical.

Biological Control

The control of mosquito breeding by the use of Tilapia fish, wherever practical, continued to be the most effective, practicable and economical method. However, an interesting aspect of biological control was noted during the year. It has been the policy to conduct netting operations as often as possible to prevent overstocking. However, during the period under review, the culling of fish at the kwaMashu sewage ponds was curtailed considerably to find out whether this would reduce fish mortality particularly during the winter period.



A VITAL LINK WITH FIELD OPERATIONS: MOSQUITO IDENTIFICATION IN THE DEPARTMENTAL LABORATORY

The results were unexpected in that fish mortality during the whole year was minimal whereas previously many truck loads of dead fish required regular disposal. On the other hand, as was to be anticipated the average fish size was reduced considerably which from a public health aspect proved an ideal mosquito control as more were now able to penetrate into shallow water.

Flies

The number of complaints received and investigated and the sources of nuisance were as follows:-

Refuse on vacant land	85	(53)
Garden cuttings and compost heaps	61	(43)
Refuse receptacles	18	(31)
Poultry keeping	31	(21)
Manure/stables	5	(3)
Miscellaneous conditions	64	(72)
Undetermined	12	(18)
Unsubstantiated	25	(29)
	301	(269)

Once again the Department did not experience any serious fly nuisances which it was unable, within its area of jurisdiction, to contain in a very short space of time.

Illegal dumping of waste or unwanted foodstuffs on vacant land continued, in spite of legal action being taken when such activities were proved, to be one of the main causes of fly breeding. However, an unusual problem faced during the year arose from the offloading of cargo in the harbour which had suffered extensive fire damage. Much of the spoiled cargo, destined for the Far East and other ports, remained within the harbour precincts which are State controlled for long periods awaiting instructions from the agents and in the interim became heavily "fly-blown". Fly infestation of surrounding business premises was inevitable and the use of adulticides was the only method of relief until such materials were removed and disposed of either by sale for cattle feed or destroyed.

Due to an inadequacy of mechanical appliances available at the two Municipal refuse disposal sites, fly nuisances on occasion caused a nuisance to nearby residents but appropriate action taken by this Department alleviated many of these problems. It is to be hoped that a more workable and satisfactory solution will soon be found for solving this recurring problem.

The method of attacking the adult fly, using an organo-phosphate poison in preference to larvicides has continued to be the method of choice.

Rodents

(a) Complaints

During the year, 571 complaints were investigated and appropriate action taken. No resistance to the use of blood anti-coagulant poisons has as yet been noted.

(b) Harbour Areas

For many years there has been an anti-rodent programme in the peri-harbour areas conducted jointly with the State Health Department. During the current year, campaigns conducted in conjunction with the Port Health Authorities were maintained when 25 rodents were trapped and the carcasses submitted to the State Health Laboratories for plague indexing.

(c) Anti-Rodent Measures

A total of 2 292 kg of dry blood anti-coagulant was used on various Municipal-owned premises during the year. Unfortunately in the more public areas, such as the beach, some residents and visitors appear to be treating these vermin as 'pets' and regularly providing feed for them. To further aggravate the position, staff shortages resulted in gaps in the routine control measures so enabling these pests to multiply even more. However, in spite of these handicaps the Department was able, generally, to contain the situation.

(d) Research

Assistance was requested by and given on numerous occasions to various institutions, learning centres and chemical manufacturers for specimens of rodents either for experimental purposes or testing the efficacy of various proprietary brands of rodenticides under actual field conditions. Rodent 'wax' baits were the predominant poisons tested but unfortunately very few proved sufficiently attractive to be rodent lethal. In previous years this type of poisoning proved most effective in sewer and storm-water systems.

(e) Surveys and Extermination Programmes

Following upon a directive from the Regional Director, State Health Services to all municipalities to the effect that rodent populations were expected to increase, a survey and extermination programme was commenced, in conjunction with normal routine work, in the central areas.

Notwithstanding that this work was hampered by staff shortages, statistics of work completed by the end of the year were as follows:-

Total premises inspected	450
Number of poison points	188
Amount of warfarin used	85 640 g
Number of carcasses recovered	95

A fair amount of warfarin was reclaimed untouched. One of the problems in anti-rodent campaigns is that there is a great deal of food waste carelessly discarded by the public which proves as, if not more, attractive than baits.

Bed Bugs

It has been many years since the Department has been as satisfied that cimex infestation in the numerous Bantu hostels has been under as complete control as it was this year.

This has only been achieved by experimenting with various forms of control offered by several insecticide manufacturing firms. The present use of 0,5% diazinon wet spray in the hands of diligent workers proved an outstanding success. During the year not one complaint was received of any infestations, whereas previously such reports were an embarrassment when methods then in use resulted in more failures than successes.

Cockroaches

The Department conducted an extensive anti-cockroach campaign in Municipal buildings, sewers, etc., but by the nature of the work involved most was undertaken during Saturdays and Sundays when the premises were accessible or vacated by employees. Excellent 'kills' were maintained with diazinon, an organo-phosphate used at 1%. No resistance to the use of this chemical by the cockroach has as yet been noticed.

Bush Clearing

The Department undertakes, on a tariff basis, the clearance of overgrowth from privately owned and Municipal premises and during the year a total of 259 hectares of vacant land was cleared of rank weed and vegetation.

In addition to the clearance of overgrowth the Department has, through necessity, been forced to undertake the removal of illegally dumped refuse from vacant sites, the costs of such work being recoverable on a time and labour basis. Due to the large amount of miscellaneous refuse dumped on to vacant land the bush clearing service slowed down with the result that employees had to be placed on extended time over weekends.

Tick Infestation

An increasing number of instances were brought to the Department's attention of infestations actually inside domestic premises.

In all cases investigated the source was found to be from either the dogs' kennels or their sleeping areas. The use of diazinon 1% proved very effective in eliminating this problem.

An enquiry was also raised by a visitor from the United States of America who was rather severely bitten by 'insects' whilst on a visit to a Provincial game reserve in Zululand. Fortunately, specimens of the offending pests were available for identification and upon examination they were found to be the larval stage of ticks. Advice was given in regard to personal treatment and the cleansing of clothing.

Domestic Pest Control Operators

During the last five years it has been Departmental policy to question aspirant operators regarding their knowledge in relation to the dangers attached to the misuse of pesticides. This "examining" is both written and oral and applicants are expected to answer satisfactorily before a "Certificate of Approval" is issued as a prerequisite for licensing purposes.

The effect of such an examination was most noticeable throughout the year in eliminating 'chancers' who were completely ignorant of the implications from entering a field of work which could possibly have unfortunate results on the public and even more likely on the operators themselves. One such instance which highlighted the Department's policy was in regard to an applicant who, upon realising the level of knowledge required before being able to undertake this type of work, promptly tore up the question papers and immediately withdrew his licence application.

The tendency in previous years for non-whites to enter this field of work 'tailed off' considerably during the year. In all 45 persons were examined of whom 16 were successful.

Following upon an article published in a Sunday newspaper in which the registration of pest control operators was brought to the notice of the public, several persons contacted the Department with a view to ascertaining whether particular firms were registered or not. This also led to the Department taking appropriate action against illegal 'backyard' operators.

An investigation into an alleged misuse of an insecticide, during the treatment of a sub-floor area of a house for termite control, was made after a complainant stated that she was affected by fumes from the chemical used four weeks after the application. However, it was found that the correct dosage rate had been applied but that the door to the sub-floor area was not subsequently kept open by the occupier thus considerably reducing the normal ventilation and airing period. In the circumstances the firm concerned used several electric fans in an attempt to dispel the accumulated odours under the floor.

Lectures to Students

Practical demonstrations and lectures were given to fifth year non-White medical students, Indian pharmacy students and White matriculation students attending a "Careers Week" programme on subjects such as refuse disposal, sewage treatment and pest control measures in relation to public health work.

IX. HOUSINGStaff

The Housing Inspectorate comprised a Senior Health Inspector and two Health Inspectors engaged on housing matters generally, demolitions and slum clearance. One position of Health Inspector is vacant because of staff shortages in the Health Inspectorate and also because of a curtailment of the Department's slum clearance programme in view of the serious housing shortage. A Learner Health Inspector is attached to this section.

Building Plans

Plans for residential development referred during the year for Departmental approval on public health grounds are summarised below:-

Accommodation	Rooms						Units	Plans
	1	2	3	4	5	6+		
Dwellings		1	20	263	309	388	981	981
Flats	201	658	567	+238			1 664	126
Other residential Additions								3 2 728
Total							2 645	3 838

+ This figure also includes flats with more than 4 rooms.

Demolitions and Conversions

In terms of the Housing Act, no person may demolish or convert to any other use any housing accommodation without the approval of the Minister, for which purpose application must first be lodged with the local authority.

In the course of 1973, 250 applications were submitted respecting premises occupied (or previously occupied) by 82 White families, 17 Coloured families, 70 Indian and 3 of mixed occupation. Of the 250 premises inspected, 70 were found at the time of inspection to be owner occupied, 102 tenant occupied and 78 vacant.

Departmental recommendation was conditional upon the occupiers obtaining alternative accommodation. Applications not supported on public health grounds amounted to 37.

These applications for permission to demolish or convert dwellings were lodged with the undermentioned projects in view:-

Flats/maisonettes	66
Commercial purposes.....	69
New dwellings.....	56
Industrial use.....	33
No immediate development.....	22
Miscellaneous.....	4
	250

Slum Clearance

This Department's routine programme continued throughout the year under the overall direction of the Deputy City Medical Officer of Health. Inspections were carried out of 80 premises which were surveyed and processed for submission to the Slum Clearance Court for the Durban local authority area.

Of the 80 premises processed, four were occupied by Whites, one by Coloureds, 49 by Indians and one by Bantu. Premises occupied by persons of more than one race group totalled nine, whilst 16 premises were vacant.

Premises of a single-dwelling unit layout numbered 78, whilst the remaining two were of two unit layout, in all a total of 82 buildings. These were tenanted by 437 families making up 1 492 persons.

The Slum Clearance Court was convened on 42 occasions and, after due enquiry, issued slum declarations in respect of 70 premises.

The Court ordered demolition in the majority of cases, the remainder of the orders being for partial repair, partial demolition and repairs to the satisfaction of the local authority.

Not all cases processed were declared slums, however, or proceeded with for various reasons, such as acquisition by the re-housing authorities on compliance by the owner with the requirements of this Department prior to the Slum Clearance Court hearing.

In order to appreciate the extent of the Department's activities from the time slum clearance was resuscitated in 1965 to the end of the current year, the following data is relevant:

1.	(a) Number of premises processed:		1 318
	(b) Race group of occupants:		
	White	118	
	Coloured	127	
	Indian	799	
	Bantu	25	
	Mixed		
	races	232	
	Chinese	1	
	Vacant	<u>16</u>	1 318
2.	(a) Building units involved:		1 756
	(b) Family units housed therein:		5 266
	(c) Persons affected:		24 229
3.	Slum clearance court sittings:		404
4.	Slum clearance court ordered:		
	(a) Total demolition	621	
	(433 implemented)		
	(b) Partial repair/ demolition	113	
	(42 complied with and 8 totally demolished)		
	(c) Renovation to satisfaction of local authority	40	
	Total slum declarations		774
5.	Rescission orders granted:		383
6.	Voluntary demolitions without declaration		345
7.	Voluntary repair/renovation/partial demolition		30
8.	Cases withdrawn due to		
	(a) ownership passing to a public authority		116
	(b) permits to demolish granted under the Housing Act		20

9.	Appeals to Minister against declaration:	
	(a) dismissed	9
	(b) upheld	1
	(c) new appeals lodged - results awaited	1
10.	Premises pending Slum Clearance Court hearing	33
11.	Prosecutions for non-compliance	
	(a) cases instituted	48
	(b) Admission of Guilt fines	R850, 00

The position respecting the premises processed (1 318) can therefore be summarised as follows:-

Slum declarations	774
Voluntary compliance	375
Demolished under Housing Act Permit	20
Pending	33
Withdrawn	116
	1 318

Illegal Shack Construction

Regular checks were carried out within the City for illegal shack development particularly in the Newlands, Sea Cow Lake, Kenville, Effingham, Avoca and other northern areas where such activities are most prevalent.

Thirty four (34) instances of illegal shack building or illegal extensions were noted during 1973 and were referred promptly to the City Engineer's Department with whom close liaison was maintained.

It was also established that 22 shacks situated off Amlock Drive (Parlock Indian Township) had been re-sited because sections of the area were being developed by the owners for township purposes. The attention of the City Engineer was directed to the fact that these shacks were being re-erected on private land and did not comply with the standards of the Slums Act or the Council resolution of the 5th September 1957 relating to minimum conditions regarding shack erection. The structures were not provided with proper sanitary accommodation, drainage, refuse removal services or water supply, hereby providing conditions favouring fly development, vermin harbourage and the creation of serious public health nuisances.

Although negligible improvements were effected before the end of the year, progress was particularly delayed in respect of the implementation of essential services (night soil and refuse removal) due to the access road being unhardened and so unusable in inclement weather. However, the matter is still being pursued with the City Engineer.

Regular surveys were carried out in the "New Farm" area of Phoenix Newtown, at Mount Edgecombe which is outside the Borough but is earmarked for incorporation in due course for the development of the projected Phoenix Indian Housing Scheme. Because further shack building was apparent during the early part of the year (1973) the matter was again raised and as a result warning notices were issued to all residents, shop owners etc. by the Magistrate at Verulam, which brought about a substantial curtailment of building activity until mid-year when development was resumed.

By the latter part of the year shack construction appeared to be under control again although the total number of shacks was estimated to be in the region of 450.

Approximately 150 illegal shacks were erected in the area known as Richmond 846, which is outside the City and adjoins the boundaries of Newlands Township and Block K, kwaMashu. The matter was referred to the Bantu Affairs Commissioner who has jurisdiction over this area.

A survey of the undeveloped area of Welbedacht disclosed that approximately 40 shacks had been erected in one section adjoining the western boundary of Lot 29 of the farm Welbedacht 1007. The Chief Magistrate, Pinetown, was approached to deal with this problem.

White Housing

During 1973 the following units of accommodation were provided by the City Council for White occupation:-

28 rooms (single plus kitchen) comprising a sub-economic letting scheme for aged persons at Arcadia. These were completed and occupied during the year.

The number of unfulfilled applications held by the City Treasurer from the White group as at 31st December 1973 was as follows -

Selling Schemes	1 900
Letting Schemes	630
Total	<u>2 530</u>

Working drawings for a revised project for the second stage of development at the Hillary Housing Scheme covering the erection of 210 flats (198 x 2 bedroom units and 12 x 3 bedroom units - economic letting scheme) in 12 blocks along Arundel Road, were completed and contract documents for the invitation of tenders put in hand. Tenders will be invited early in 1974.

Sketch plans were commenced for a project of sub-economic flats in the South Beach/Point area.

No schemes were completed by the State Department of Community Development during the year and no schemes are planned for the immediate future.

Coloured Housing

It is regrettable to report again that the demand for housing for the Coloured community is extremely critical and, according to the City Treasurer's records alone, the shortfall as at 31st December 1973 was :

Purchasing schemes	1 664
Letting schemes	988
Total	2 652

No schemes were completed by the City Council during the year. The situation was such that the Department felt constrained to defer action under the Slums Act because of the impossibility of arranging alternative accommodation for the occupants who would be displaced in consequence. Never the less the Department of Community Development managed to re-house 35 Coloured families from declared slum premises. It is hoped that the demand will be relieved to a great extent over the next few years with the completion of schemes presently under development which, briefly, would make available (subject to funds being available) some 1 700 units of accommodation for Coloured occupation by March 1975 of which the City Council would construct 1 000 units and the Department of Community Development the balance. Thereafter, 1 500 dwellings for three successive years, between 1976 and 1978 would be constructed as a continuous programme by the City Council and the Department of Community Development in newly developed areas i.e. Newlands and Mariannhill (ex-City) on the basis of the City Council erecting 1 200 units annually and the Department of Community Development providing 300 units.

The construction by the City Council of a scheme of 144 economic letting and 156 sub-economic letting flats in Gardenia Road, Merebank, was commenced and good progress made by the end of 1973 with the result that the first units are expected to be handed over for occupation by mid-1974.

The allocation of Government housing funds for a project covering the provision of lower sub-economic letting accommodation for 110 families in Tara Road, Wentworth, was received and construction commenced. This project had progressed well and completion is expected early in the new year.

National Housing Commission approval of a further project covering the erection of 126 flats (sub-economic) along Duranta Road, Merebank, was also awaited. This scheme involves the elimination of the present Council Coloured shack settlement in Duranta Road and the re-alignment of the tarmac roadway.

The approval and allocation of Government housing funds for a project to provide 360 economic flats on the Sydenham Hotel site, Sparks Estate, was received and working drawings and documents for the invitation of tenders were put in hand. Tenders will be invited early in 1974.

The preparation of an "Outline Development Plan" for the recently proclaimed Newlands East Coloured group area was completed and a detailed project covering the first 379 economic and sub-economic dwellings received City Council sanction and now awaits the approval of the National Housing Commission. This township, when complete, will provide some 3 450 living units with an estimated total population of 20 000 persons.

The City Council is also investigating the possibility of erecting flats in the Sparks Estate and Greenwood Park areas.

The Department of Community Development assisted in alleviating the housing shortage by the provision of the following living units during the year:-

37 houses (economic selling) at Wentworth			
198 economic flats	"	"	)balance of
132 sub-economic flats	"	"	)342 units
			)nearing completion,
			giving total
			of 672 flats.

Projects which were being planned included the following -

- 64 economic type flats in Havelock Road, Greenwood Park.
- 44 economic type flats in Wentworth area (between Genoa Road, Quality Street and Umbria Road, Wentworth).
- 56 economic type flats in Villa Road, Sparks Estate
- 800 ha acquired at Mariannhill for housing development which will initially provide 600 living units to house 3 000 persons with further expansion possible at a later stage.

Indian Housing

The demand for housing by the Indian community continued and the number of unfulfilled applications lodged with the City Treasurer as at 31st December 1973 was as follows -

Purchasing schemes	7 772
Letting schemes	10 784
Total	18 556

It is not anticipated that this position will improve until the new Indian townships to the north of the City, viz. Newlands and Phoenix have reached an advanced stage. The number of housing units and estimated population for these townships is as follows -

	<u>No. of Units of Housing</u>	<u>Estimated Population</u>
Newlands	9 700	60 000
Phoenix	24 470	152 000
Total	34 170	212 000

Acquisition of the land required for the Newlands Indian Township continued whilst detailed planning of the first community area was completed with the view to an early submission of project application for approval.

With regard to the Phoenix Indian Township, funds were made available early in the year permitting good progress to be made with the construction of the spine, bus and minor roads serving Community Areas 2, 3 and 4 together with the installation of water, sewerage reticulation and stormwater drainage. A start was also made with the construction of the main access water supply pipeline and the first water reservoir in the scheme. Extensions to the kwaMashu Sewerage Treatment Works which will accept sewerage from Phoenix were also well advanced.

The contract for the erection of 450 sub-economic letting flats in Neighbourhood Unit 10 (Woodhurst) at Chatsworth was completed. In Neighbourhood Unit 11 (Crossmore) the contract for 119 economic selling "better type" low cost houses was also completed, whilst work continued on the erection of 1 394 economic and sub-economic houses. In all, a total of 994 dwelling units were handed over for occupation during the year.

Tenders were received for the erection of 306 sub-economic flats in Neighbourhood Unit No. 11 and 110 economic dwellings in Neighbourhood Unit No. 6. Work on these two projects is scheduled to commence early in 1974.

Although the Department of Community Development did not complete any housing in the City for Indians, 300 economic selling houses were provided at Shallcross, outside the City boundary.

Other schemes planned are -

- (1) 50 economic selling dwelling to be erected at Shallcross.
- (2) 200 economic selling dwellings to be erected at Shallcross Ext.1.

Serviced sites, numbering some 163, will also be made available for sale to and development by private individuals at Shallcross Extension 1.

The Department of Community Development re-housed 85 Indian families during the year from "declared" slum premises, whilst the City Council re-housed 191 families similarly displaced.

Bantu Housing

kwaMashu Township

No houses or hostels were built at kwaMashu during 1973 but construction continued throughout the year on new schools and additional classrooms at existing schools for which authority had been obtained late in 1972. A total of three new schools and 42 additional classrooms were completed and handed over for use during the year.

Road improvements, including the re-alignment of the main spinal road, were undertaken at the Township Centre.

Umlazi Glebe

The construction of the hostel blocks for single males proceeded during the year and at present there are 10 buildings in various stages of completion, the most advanced being almost ready for occupation. The project also includes the provision of roads, water, sewerage and electricity and these services are being extended as progress is made with the hostel blocks.

The Administration Office which has been completed is due for hand-over shortly. The scheme, which will eventually provide 19 616 beds for males as indicated in the above paragraph, is now well in hand and progress should continue at an accelerated rate.

Extra-City Schemes

The Durban City Council, acting as agent for the South African Bantu Trust, has been actively concerned in the planning and development of two vast Bantu townships situated outside Durban, and the current position is briefly reported below:

(i) Umlazi

Work continued in the township to the south of the City at the restricted tempo of development of the previous year and work was confined mainly to the extension of services and the construction of roads and schools. It was possible to allocate 414 houses for occupation but, until the augmentation of the main water supply reaches the stage nearing completion it will not be possible to make available a large number of houses. A total of 18 634 houses have been completed so far.

(ii) Ntuzuma

While no houses were commenced during the year at this new scheme to the north of the City, it was possible to complete and hand over for occupation 75 houses by using a temporary water supply. Two schools were also completed and handed over.

Work on the main water supply was given priority and the construction of Reservoir NR3, which will serve most of the houses presently under construction, progressed to near completion. The main pump house serving this reservoir was also nearly completed and should be operative by May 1974. By the 31st December 1973, 577 houses had been completed.

The following details supplied by the Port Natal Bantu Affairs Administration Board, recently established by the State, reflect the Municipal housing position as at 31st December 1973. The Board is now responsible for all Bantu administration matters previously handled by the local authority and includes the magisterial districts in the coastal region.

<u>Institution and Type of Accommodation</u>	<u>Units</u>	<u>Occupants</u>
(a) <u>Municipal family housing</u>	<u>Houses</u>	
Lamont and Lamont Extension)		
Lamont Extension: Economic) Housing Scheme)	2 763	24 000
Chesterville	1 265	10 500
kwaMashu (ultimately 16 000)+	15 404	110 500
	<u>19 432</u>	<u>145 000</u>

+ Unit 4 KG (shared) houses regarded as two units.

(b) <u>Municipal Single Accommodation</u>	<u>Beds</u>
(i) <u>For Men</u>	
Dalton Road Location	1 452
Jacobs Location	886
S.J. Smith Hostel	4 413
kwaMashu Location (Hostel Unit)	16 880
Umlazi Glebe Hostel	3 041
(ii) <u>For Women</u>	
Thokoza Women's Hostel, Grey St.	677
	<u>27 349</u>

In addition to permanent residents, tickets for casual accommodation were issued nightly and lodgers' permits issued in family locations.

Other forms of Bantu housing available included domestic servants' accommodation provided by householders and various classes of employees housed by State and Provincial authorities and employers in premises licensed under Section 9 (4) of the Bantu (Urban Areas) Consolidation Act No.25 of 1945, as amended.

X. MILK SUPPLIES

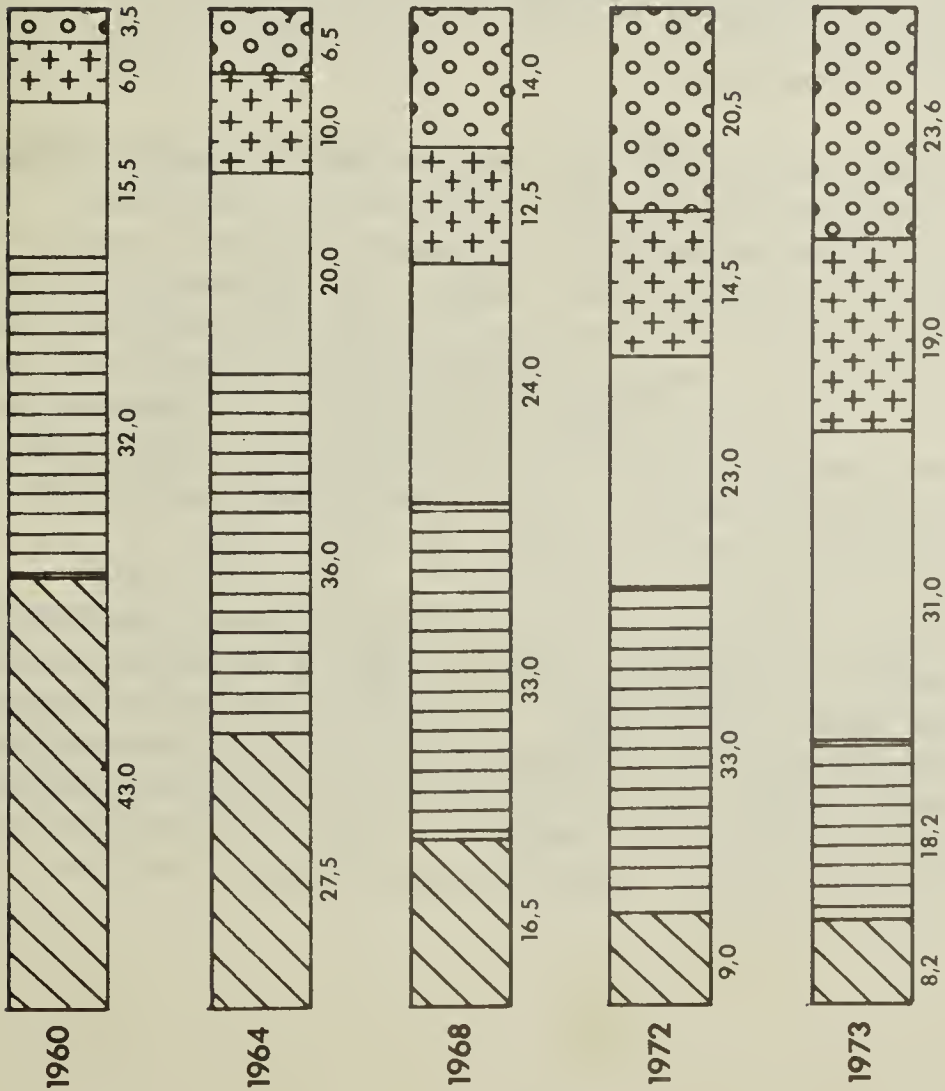
FRESH MILK PRODUCTION

The milk supply to the City of Durban is drawn mainly from the Midlands and southern areas of Natal, while approximately 5,6% of the supply is produced in northern Natal and 18,1% in East Griqualand.

Climatic conditions for dairying were in the main very satisfactory with particularly good spring and early summer rains. Earlier, in April, a slight shortfall in supply was experienced for a few days and it was found necessary to allow the introduction of some 54 000 l of "accommodation" milk which was restricted exclusively to the manufacture of sterilised milk. Milk production by registered producers reached a peak of some 400 000 l daily in December and fell to some 325 000 l in April. Mean daily production during the year was approximately 361 000 l.

Certain minimum structural and hygienic standards of farm dairy premises require to be met before producers are eligible for registration as suppliers of fresh milk to the City. The Dairy Inspectorate, comprising a Senior and three Health Inspectors, is engaged on the registration of new suppliers, the routine activities of inspections and advisory work relative to the maintenance of high structural and cleanliness standards of farm dairies and milk depots. Bulked raw milk of each producer was sampled on a regular basis for testing in the departmental laboratory. Sediment testing of can milk was carried out on the receiving platforms, and during 1973 a total of 14 028 l of milk was rejected due to the presence of excessive visible dirt.

Machine milking of cows continued to increase and of the 474 registered producers at the end of 1973, 351 (74%) used mechanical means, compared with 67% at the end of 1972. The installation of refrigerated bulk storage tanks on farms is also increasing and there were 120 in use at the end of 1973, an increase of 30 over the previous year. This modern, hygienic method of cooling and storing milk was actively encouraged throughout the year.



YEAR	NUMBER OF REGISTERED PRODUCERS	MEAN DAILY PRODUCTION (LITRES)	MEAN DAILY INTAKE INTO DURBAN (LITRES)
1960	710	327	152 967
1964	600	433	183 267
1968	567	571	221 436
1970	517	649	252 036
1971	520	683	270 900
1972	502	707	281 747
1973	474	761	301 144

LEGEND	
LITRES OF MILK	
	LESS THAN 250
	251 - 500
	501 - 750
	751 - 1000
	OVER 1000

DAILY MILK PRODUCTION OF REGISTERED PRODUCERS AND
RELATED INFORMATION

Undoubtedly the most significant trend with regard to Durban's milk supply is consolidation of production in that during the last 10 years the number of registered producers has decreased by 22% while the volume of fresh milk received in the City has increased by 77%.

TRANSPORTATION OF FRESH MILK

Although milk is still transported in cans to one of seven inland receiving depots (and directly to one City dairy plant) where it is weighed, re-cooled and stored in bulk pending tanker transportation to Durban, there is also the milk that is stored in bulk tanks on farms and is uplifted by farm collection tankers which call at each farm on alternate days. In fact over 65% of the daily fresh milk intake at the City's processing plants arrives in insulated road tankers and therefore the hygiene of receiving depots and milk tankers has to be kept under constant surveillance by the Department.

HEAT-TREATING, BOTTLING AND DISTRIBUTION

The entire fresh milk supply to Durban is heat-treated, either by pasteurisation or high temperature sterilisation in three central processing plants and thereafter transported to suburban depots in refrigerated pantechicons with other dairy products for distribution to householders and retail outlets by motor transport, electric vehicles or hand carts. During the year to keep down costs, the dairies rationalised distribution by introducing zones of supply, a system successfully utilised in various large cities elsewhere.

Milk and milk products are sampled daily either at the factories or the local depots. The distributors' own laboratory staff carry out certain quality control checks and this Department assists in tracing the source of any post-pasteurisation contamination that may occur and ensures that remedial measures are taken. All personnel likely to come into contact with milk and milk products at the factories are subjected to Vi-testing and are immunized against typhoid, 655 persons being dealt with in this way.

It is interesting to note that only 65% of the output of the three "bottling" plants is consumed in the City, the remainder being sold in neighbouring areas and supplied to shipping. The tendency is for a substantial quantity of milk to be distributed via supermarkets in plastic bottles and the trend of milk sales away from glass bottles is indicated by the fact

that during 1971, 72% of milk was sold in glass bottles as against only 16% in plastic bottles, whereas during the year under review the figures were 54% and 36% respectively.

MILK PRODUCTS

The average daily sales of pasteurised milk by the three dairies amounted to some 232 000 l (227 530 l) and sterilised milk accounted for daily sales of over 35 000 l. The balance of the raw milk intake, supplemented by milk powders, was used in the manufacture of a variety of dairy products with mean daily sales of more than 26 000 l. Regular sampling of these products for bacteriological testing was maintained.

Three ice-cream factories are situated in Durban and certain frozen milk products are introduced from a factory at neighbouring Isipingo and two manufacturers in the Transvaal. Yoghurt is also imported from a Transvaal factory to a local depot. Regular inspections of premises concerned with these products are carried out and routine sampling of the product is undertaken.

Soft dairy mix and scooped ice-cream, although manufactured by milk dealers, are sampled at restaurants and tea rooms to check on the storage and serving hygiene of these products. At the end of 1973 there were some 60 shops selling scoop ice-cream and over 80 selling soft mix. Naturally sampling is undertaken more frequently at those establishments with a poor bacteriological product history.

INSPECTIONS AND LABORATORY CONTROL

The inspectional staff carried out the following inspections during the year -

(i)	City dairy premises	860	(869)
(ii)	Country receiving depots	278	(302)
(iii)	Farm dairy premises	1 687	(1 607)
(iv)	At the request of milk producers	157	(151)

The Dairies' Inspectors were also responsible for collecting 5 961 samples of raw milk from the herd of each registered producer and returning them to the laboratory under refrigeration for testing. Samples of milk from tankers were regularly tested as was farm water when necessary for bacteriological examination.

Generally the bacteriological quality of samples taken from factory "lines" were superior to those taken elsewhere in the City, indicating that ambient temperatures and post-pasteurisation control lapses, especially during the summer months, play an important part in causing a deterioration of hygienic quality.

Two Laboratory Assistants, under the guidance of the Veterinary Medical Officer were responsible for carrying out the bacteriological and physical tests in the departmental laboratory on milk and milk products samples, as well as various food and water samples.

Set out hereunder are statistics relative to milk production, sampling and laboratory testing -

A. <u>Raw Milk Production</u>	<u>1973</u>	<u>1972</u>
(1) Number of registered producers	474	502
(2) Mean daily milk production per herd	761 ℓ	707 ℓ
(3) Mean daily volume consigned to local factories	301 144 ℓ	281 747 ℓ
B. <u>Heat-Treated Milk and Milk Products Production</u>		
(a) <u>Pasteurised Milk</u>	<u>1973</u>	<u>1972</u>
(1) Mean daily production	232 114 ℓ	227 530 ℓ
(2) Mean daily volume sold within Borough	153 720 ℓ	151 790 ℓ
(3) Percentage sold within Borough	66,5%	67%
(4) Percentage of production sold in:-		
(i) Glass bottles	54%	63,5%
(ii) Plastic bottles	35,8%	25,5%
(iii) Cans	10,2%	10,7%
(b) <u>Sterilised Milk</u>		
Mean daily production	35 974 ℓ	28 115 ℓ
(c) <u>Ice-Cream, Sorbet and Ice Milk Confections</u>		
Estimated mean daily consumption	18 000 ℓ	17 500 ℓ

(d) <u>Other Milk Products: Cream, Skim, Flavour and Cultured Milk etc.</u>	<u>1973</u>	<u>1972</u>
(1) Mean daily production	26 935 ℓ	23 828 ℓ
(2) Percentage sold within Borough	63%	65,5%

C. Sampling

1. Samples taken under the Foodstuffs, Cosmetics and Disinfectants Act and sent to the State Chemical Laboratory -

	<u>1973</u>	<u>1972</u>
(a) Milk	166	138
(b) Cream	36	35
(c) Ice-cream	52	48

2. Samples submitted to the Consultant City Pathologist for bacteriological examination -

(a) Milk	30	177
(b) Cream	10	11
(c) Ice-cream and Soft serve	18	23

3. Samples submitted to the State Health Laboratory for bacteriological examination for tuberculosis -

Raw milk	3	15
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4. Samples submitted to the departmental laboratory -

Raw bulked milk	5 961	6 069
Pasteurised and "actinised" milk	1 213	1 132
Pasteurised cream	203	163
Cultured products	221	42
Ice-cream, iced confections, soft serve	1 374	1 338
Separated milk and flavoured milk	296	171
Sterilised milk	14	24

D.	<u>Laboratory Tests Performed and Results</u> <u>(Departmental Laboratory)</u>	<u>1973</u>	<u>1972</u>
(a)	<u>Milk and Milk Products</u>		
	Presumptive coliform deter- minations	3 307	3 621
	Coliform plate counts	132	325
	Eijkmann tests	2 320	1 896
	Plate counts (Astell roll-tube)	3 017	3 412
	Thermoduric organism counts	7 105	7 228
	Methylene Blue reduction tests	455	334
	Resazurin reduction tests	4 640	4 947
	Phosphatase tests (Aschaffenburg and Muller)	2 788	2 830
	Brucellosis (stained antigen ring test)	1 547	1 860
	Mastitis (direct microscopic and coulter counter)	4 993	4 959
	Mastitis antibiograms	8	7
	Inhibitory substances (T.T.C. method)	5 961	6 069
	Sterilized milk	14	24
	Examinations for salmonellae	108	196
(b)	<u>Prepared Foods</u>		
	Enterobacteria, staphylococcal identification and Eijkmann tests	56	66
(c)	<u>Water Samples</u>		
	Membrane filter counts and Eijkmann tests	294	522
(d)	<u>Others</u>		
	Swabs and rinses (total counts and coliforms)	164	162
E.	<u>Sediment Tests Performed at Depots</u>	3 810	4 384

F. Results of Tests on Producer (Farm) Milk

Test	No. of Samples	% Satisfactory
Resazurin (one hour)	4 640 (4 947)	86% (96%)
Visible dirt	3 810 (4 384)	91% (93%)
Inhibitory substances (T.T.C.)	4 513 (4 966)	98% (99%)
Thermoturic count	4 643 (4 975)	78% (81%)
Mastitis (somatic cell count)	4 497 (4 959)	91% (94%)
Brucellosis (stained antigen)	1 547 (1 860)	81% (94%)
Eijkman on 0,01 ml	1 170	81%

Note: The standards applied in interpreting the above tests were -

One hour resazurin test - fail if disc reading below two and a half;

thermoduric organisms - over 50 000/ml unsatisfactory;

mastitis - herd mastitis problem severe if cell count exceeds 1 million cells/ml.

G. Results of Tests on Heat-Treated Milk and Milk Products

		Test and Percentage Satisfactory				
	No. of Samples	Plate Count	Thermoturic Count	Phosphatase Test	Presumptive Coliform	Eijkman Test
A. Pasteurised Milk						
(i) Bottled	497 (519)	73% (83%)	68% (76%)	100% (100%)	83% (79%)	99% (97%)
(ii) Plastic	404 (375)	78% (90%)	74% (85%)	100% (100%)	86% (91%)	99% (99,5%)
(iii) Can	89 (113)	82% (86%)	63% (76%)	100% (100%)	76% (84%)	97% (99%)
B. Cream	203 (163)	92% (92%)		100% (100%)	77% (76%)	95% (95,7%)
C. Ice-cream & Sorbet						
(i) Factory	425 (374)	96% (98%)		100% (100%)	85% (83%)	98% (100%)
(ii) Retail Outlets	306 (335)	79% (86%)		100% (100%)	62% (55%)	98% (99%)
(iii) Soft Dairy Mix	498 (486)	86% (90%)		100% (100%)	49% (63%)	99% (98,5%)
(iv) Iced Confections	145 (143)	94% (97%)		100% (100%)	76% (86%)	100% (99%)
D. Flavour Milk	89 (156)	81% (97%)		66% (75%)	66% (75%)	98% (95%)
E. Separated Milk	207 (67)	83% (78%)		100% (100%)	64% (65%)	96% (94%)
F. Cultured Milk	221 (92)			100% (100%)	71% (81%)	96% (92,4%)

XI. PROSECUTIONS

Legal proceedings instituted by this Department for contraventions of health statutes, regulations framed thereunder or local bylaws are processed by the City Police Department, and in respect of cases falling under the jurisdiction of the Magistrate of the District of Durban, are prosecuted by a member of the staff of that Department as private prosecutions.

During 1973 all departmental prosecutions finalised were instigated by the Dairies, Environmental Sanitation, Food Hygiene, and Housing branches of the Health Inspectorate, as per the subjoined schedule, and were dealt with through the Durban Magistrates' Courts except for four cases in the Pinetown (including Chatsworth) Magistrates' Courts and five in the Verulam (including kwaMashu) Magistrates' Courts.

This Department remains perturbed at the delays which inevitably occur before prosecutions for contraventions of public health legislation are finalised. The average time taken between the despatch of documents from the Department until admission of guilt is signed or trials have taken place has been approximately 47 calendar days.

It is not feasible to take advantage of the "spot" fine system due to the multiplicity and infrequency of specific contraventions, but arrangements were made to adopt the "Summary Admission of Guilt" procedure. Accused persons are afforded the facility of consenting to judgement within a period of 14 days, should they so elect, thereby obviating the service of summons requiring appearance before a Magistrate being served upon them personally. The new procedure was introduced in March and, by the year end, 52 cases had been timeously concluded with a minimum of administrative routine and expense.

Contravention	Admitted Guilt (Counts)	Found Guilty	Fines Paid	Remarks
<u>FOODSTUFFS COSMETICS & DISINFECTANTS ACT</u>			R	
Hot Dog sauce: excessive preservative	1		30,00	
Sweetening substances not permitted	1		25,00	
Squash: less than 25% natural fruit juice	1		25,00	1 not guilty
Sauce: excess preservative	1		30,00	
Food containing synthetics	1		25,00	
Mustard: excessive preservative	1		50,00	
Minced meat: containing preservative	2		110,00	
Boerewors: excess preservative	1		30,00	
Vinegar: sub-standard	2		80,00	
Squash containing brominated oil	1		30,00	
Food unlabelled	1		30,00	
Milk: less than 3% milk fat	1		30,00	
<u>PUBLIC HEALTH ACT</u>				
Exposure of milk and products to contamination	2		70,00	
Exposure of food to contamination	3		100,00	

Contravention	Admitted Guilt (Counts)	Found Guilty	Fines Paid	Remarks
<u>SLUMS ACT</u>			R	
Failure to comply with Slum Clearance Court Order	2		60,00	
<u>MOSQUITO REGULATIONS</u>				
Mosquito development	2		50,00	
<u>BUILDING BYLAWS</u>				
No privy accommoda- tion	2		60,00	
<u>FOOD BYLAWS</u>				
Unclean conditions	17	1	605,00 50,00	or 50 days
Food exposed to contamination	10	2	310,00 100,00	or 100 days
Wearing apparel in food room	5		45,00	
No towels, soap and nailbrushes	4		60,00	
No protective clothing	7	1	140,00 10,00	or 10 days
Inadequate hot water	2		50,00	
Vehicle un- registered	7	1	165,00 30,00	or 30 days
Defective building	4		80,00	
Dirty cooking utensils	3		40,00	
<u>GENERAL BYLAWS</u>				
Unauthorised dumping	22	1 1	266,00 5,00 20,00	or 5 days or 20 days

Contravention	Admitted Guilt (Counts)	Found Guilty	Fines Paid	Remarks
<u>MILK (AND MILK PRODUCTS) BYLAWS</u>			R	
Milk)below bac-	6		205,00	
Cream)terial	2		65,00	
Ice-cream)standard	6		200,00	
<u>PUBLIC HEALTH BYLAWS</u>				
Unclean conditions	16	1	460,00 20,00	or 20 days 1 not guilty
Fly breeding	3		70,00	
Mosquito breeding	1		30,00	
Improper disposal of a carcass	1		40,00	
Conveying manure	1		30,00	
Slaughtering of birds	1		30,00	
Defective premises	4		80,00	
		1	30,00	or 20 days
		1	20,00	or 20 days
Poultry keeping	1		20,00	
Defective sanitary fittings	5		125,00 30,00	or 30 days
Defective stormwater drains	1		15,00	
Occupation of un- suitable room	1		10,00	
Insufficient refuse receptacles		1	10,00	or 5 days
	155	12	3 976,00	

XII. ALLIED HEALTH SERVICES

Acknowledgement is due to the City Engineer, Director of the Municipal Abattoir and the Director of Parks, Recreation and Beaches for their respective contributions in providing information concerning the services performed by their departments which have a direct bearing upon public health.

ENGINEERING SERVICES

A. WATER

Effect of Metering

As stated previously, a reduction of ponding of water on private premises and on the Council's street drainage systems "may be expected". There is no evidence, however, to confirm this.

At the end of the year 1973 under review approximately 46 000 meters representing 76% of the total programme, had been installed. Areas metered during the year include Manor Gardens, Glenwood, Umbilo, Congella, Sherwood, Tollgate, Overport, Puntan's Hill, Morningside, Stamford Hill, Greyville, Berea and Point.

Summarised Results of Bacteriological and Chemical Examination of Public Supplies

Conditions at Shongweni Dam have generally improved over the past year in relation to previously high algal growth conditions. However, ever-increasing amounts of soluble manganese from the dam, in the summer months have required careful dosage of higher than normal pre-chlorination to remove this manganese from the water.

Filtered water throughout the City reticulation was monitored for chlorine content and bacteriological quality. Results were good but with the possibility of a cholera outbreak and evidence that the extremities had low levels of chlorination, the level of chlorination was raised in October to attempt a minimum of 0,2 p.p.m. residual chlorine throughout the City. Except for a few isolated areas this has been successful.

Re-chlorination was carried out at Chatsworth, Currie Road and Mobeni. However, during winter it was necessary to stop the Currie Road application due to complaints of high chlorine.

Summarised results of bacteriological and chemical examinations are scheduled below showing samples of water supplies at source or inlets to treatment works -

Faecal E. coli per 100 ml	UMGENI RIVER	UMLAAS RIVER		
	Inlet to Nagle Dam %	Shongweni Works %	Umlaas Fil- tration %	Sterkspruit at Shongweni %
0	12	0	13	10
1 - 2	0	0	0	0
3 - 10	5	0	0	0
11 - 25	5	0	0	0
26 - 100	48	22	13	0
101 - 200	25	33	27	10
201 - 500	5	17	40	20
501 - 1000	-	22	0	25
1000+	-	6	7	35

An average of the chemical analyses of water sampled at the several treatment works, from the two sources of Durban's supply, is set out below -

Analysis	Umgeni River	Umlaas River
PH	7,4	7,3
PHs	9,0	8,7
Colour	33	10
Conductivity	86	315
Turbidity	14,1	7,0
Parts per million of:		
Total dissolved solids	62	203
Chlorion	13	46
Iron	0,53	0,11
Silica	13	12
Ammoniacal nitrogen	0,01	0,04
Nitrate nitrogen	0,3	0,6
Permanganate value	1,6	1,6
Free carbon dioxide	3,2	8,8
Hardness as CaCO_3 (p.p.m.):		
Total	29	67
Calcium	16	34
Non-carbonate	0	10
Carbonate	28	57
Soda alkalinity	6	1
Total alkalinity	34	58

The swimming baths under the control of the Department of Parks, Recreation and Beaches and the Department of Bantu Administration were checked for chemical and bacteriological quality throughout the year. The results indicated a general good quality in all the baths but again with the possibility of cholera, it was necessary to insist on higher chlorine levels. This has been carried out. The new pool on the Bluff was incorporated in the sampling schedule.

Beaches and the Bay were monitored for bacteriological quality and found to be similar to the improved conditions of 1972 since the outfalls have been commissioned. The conditions in the Bay improved slightly on previous years results.

B. PUBLIC CLEANSING SERVICES

Refuse Removal

Fifty-five daily refuse runs using 16 m³ box body vehicles with four hundred and twenty five Non-White labourers, mainly Bantu, removed a total of 711 000 m³ (142 200 tons) during the year.

The methods of removal are by: (a) removing the bin and emptying same into the vehicle in the Town and Beach area; (b) with the use of refuse skeys in the remainder of the Old Borough; and (c) with the issue of plastic refuse disposal bags in the entire added areas.

The use of plastic bags has reduced the labour required and speeded the collection rate. However, some snags have arisen due to the public not co-operating in placing the bags at their boundaries and to bags splitting open due to incorrect usage. The main issue is the oil crisis which has increased the cost by 40% as at the end of the year and to the short supply of raw materials which has resulted in the existing areas only being kept on this system and no new areas added, as was the intention. Approximately 500 000 bags were used per month.

Refuse Disposal

All refuse is disposed of at the Lamont Disposal Site and the Springfield Disposal Site together with all industrial refuse conveyed by private transport and received at the tariff rate of R0,50 per 100 kg for solid refuse and R1,00 per 200 l for liquid waste. The method of disposal is by a modified form of sanitary landfill using heavy mechanical plant. Anti-fly control is effected by Cleansing Division staff using a 10% Tugon bait and spray. Anti-rodent measures are carried out by the City Health Department.

Night Soil Collection and Disposal

Fourteen vehicles and a total of one hundred and seventy five Bantu labourers were used in the monthly collection of 120 000 pails and their disposal at the Jacobs Dilution Station and the Springfield Dilution Station. This figure remained fairly constant during the year.

Street Sweeping

Five hundred and thirty Non-Whites, mainly Indian, were used in street sweeping and beach cleaning. The greatest difficulty in this cleaning is in areas frequented by Non-Whites such as the Point area and the vicinity of the Markets and Victoria Street Bridge where it was almost impossible to keep the areas clean. The sweeping gangs were augmented by the use of vehicles whenever possible which acted as mobile refuse collection points and so cut down on sweeper travelling time to the dumping points.

Vacuum Tankers

Five tankers with a total of fifteen Indians as crew were required daily to deal with the conservancy tank and septic tank clearances. These services were dealt with almost immediately and no householder was required to wait longer than 24 hours for a service.

Sewer Blockages

Four vehicles with twenty Indian labourers were used for this function which dealt with sewer blockages from private dwellings at the tariff rate and to sewer mains in the City with the exception of Chatsworth and the Bantu townships.

Stormwater Mains

Three vehicles with a total of fifty five Indian labourers were used as mobile gangs for the clearing out of stormwater inlets and mains. Two foot gangs of fourteen Indians each were used in the City areas for this purpose also.

Culvert Cleaning

Three gangs of fifty five Bantu were used as stationary gangs for the removal of sand and debris from the major stormwater culverts.

C. PUBLIC CONVENIENCES

There are, under the control of the City Engineer, 27 public conveniences for use of White males, 28 toilet blocks for use of White females, 48 for use of Non-White males and 47 for Non-White females.

Two additional toilet blocks for use of Non-White males and females are envisaged and these will be situated at the corner of Sydney and Francois Roads and at the corner of Queen Street and Albert Street.

D. AIR POLLUTION

The Pollution Control Section continued to monitor and control all sources of air pollution including industry, commerce, locomotives, shipping and road vehicles. Serious complaints were received throughout the year regarding refuse burning, bush fires, tip fires and sugar cane fires.

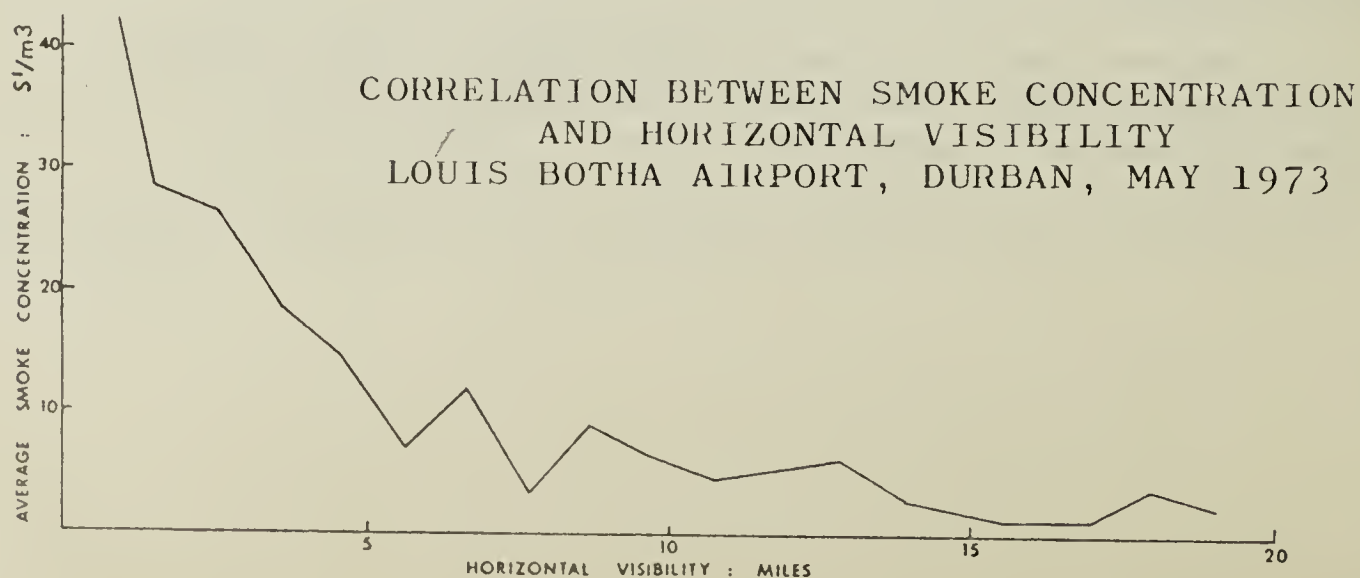
The advent of the fuel crisis in the latter half of the year generated numerous enquiries regarding the conversion of oil-fired appliances to coal firing. Advice is being given to industrialists which will preclude smoke, ash and dust emission from such conversions. There was a general reduction in the number of odour complaints submitted for investigation.

Results from the Durban air pollution monitoring stations, which form part of the National Survey, were satisfactory and a survey of traffic fumes in the City area showed the following trend -

	<u>1973</u>	<u>1971</u>	<u>1968</u>
Carbon monoxide p.p.m.	9	10	9
Hydro-carbons p.p.m.	1	4	5
Oxidants p.p.h.m.	2	2	1

The reduction in hydro-carbons is probably associated with the smoother flow of traffic due to one-way routing through the City centre.

A survey to establish the cause of occasional poor visibility at Louis Botha Airport established a significant correlation with smoke concentration, which is shown on the graph set out below. The survey also highlighted sources of excessive smoke and fume which were brought under control.



E. TRADE EFFLUENT CONTROL

Trade effluent control continued throughout the year with the monitoring and analysis of industrial effluents to ensure that there were no serious discharges to sewer or stormwater. Some nine thousand samples were collected for analysis and one thousand technical visits were paid to firms concerned. The close liaison maintained with industrialists has reduced the pollution load to the Treatment Works and the risk of water pollution.

Tariffs levied against factories for the acceptance of waste water increased during the year in accordance with the schedule which had been agreed with the Chamber of Industries.

The noted improvement in processing applications for Trade Licences, Offensive Trade Permits and Building Plans, due to the merging of the Air Pollution and Trade Effluent sections, was maintained.

ABATTOIR SERVICES

Statistics showing the total number of animals slaughtered, and the carcasses condemned as unfit for human consumption, are reflected below -

Animal	Slaughtered	Carcasses Condemned	Cysticercosis Carcasses passed con- ditional upon freezing
Bovines:			
Mature	176 275 (193 876)	1 721	3 110
Calves	10 140 (17 817)	868	55
Swine	123 057 (110 467)	2 887	449
Sheep/Goats	628 601 (727 548)	3 884	-
Total	938 073 (1 049 708)	9 360	3 614

As these figures show, during the period there has been an increasing shortage of red meat in relation to consumer demand. In collaboration with various authorities and producer organisations the Meat Control Board is making every endeavour to promote the production

of red meat in order to ensure adequate supplies for the future. Steps taken to encourage production and stabilise the meat industry include better floor prices, the support price scheme and improved marketing arrangements. Appeals have also been made to farmers to conserve their breeding stock and not to succumb to the temptation to market these animals because of high prices being realised.

Whale meat which is processed and packaged by the Union Whaling Company continues to be marketed within the City after re-inspection at the Municipal Abattoir. In addition this company operates its own laboratory service where meat is subjected to veterinary inspection prior to distribution. This meat is marketed for both human and pet consumption and during the year 202 208 kg has been inspected and passed.

The new regional abattoir which is being designed to serve the needs of both the Durban and Pietermaritzburg areas is programmed for completion by the end of 1976 and, in the meanwhile, extensions to the existing Abattoir have been completed at a cost of approximately R800 000. As the new project will be operated by the Abattoir Commission, they have indicated their intention of negotiating for the take over of the present Municipal Abattoir as from the beginning of February 1975. It is intended that Council staff be seconded to the Commission to run the abattoir for a period of six months from that date and during that period the Commission will negotiate with the present staff to transfer from the Municipal service to the Abattoir Commission. No doubt this will assist the Commission when their Cato Ridge project becomes operative as they hope to have experienced operators to manage that undertaking.

DISPOSAL OF HUMAN REMAINS

Public Cemeteries

(a) Whites

The interments were as follows -

Stellawood	796
Red Hill	60
Umgeni	8
Hillary	23
West Street	35
Total	922

(b) Indians

Available sites are limited but the provision of future cemeteries, particularly in the Southern areas, is being planned at present.

The following deceased Indians were interred during the 1972/73 financial year -

Red Hill	328
Cavendish (Chatsworth)	540
Hillary	13
West Street	133
Kenilworth	40
Springfield	67
Stellawood	80
Sydenham	10
Total	1 211

(c) Bantu

A total of 5 544 Bantu were interred during the period under review, 4 844 of the burials taking place at Red Hill Cemetery. Of this figure of 4 844, 3 875 represented pauper burials, the vast majority of which was not resident in the City, but had been brought to the Government and Provincial hospitals in the City and had died there. The Council has expressed its concern at this situation and an approach has been made to the responsible Government Department with a view to the Bantu being interred in a regional cemetery such as has been established at Ntuzuma. This aspect remains a matter of urgency, as unless alternative sites are found for the burial of Bantu, serious inroads will be made on the land available in the Red Hill cemetery for the burial of White persons.

The following Bantu burials took place during the 1972/73 financial year -

Red Hill	4 844
Hillary	26
Mayville	663
Stellawood	11
Total	5 544

(d) Coloureds

Burial sites have been set aside in the Stellawood Cemetery for this group and it is also proposed to establish a further cemetery in the Merewent area in the not too distant future.

The following burials of Coloured persons took place during the 1972/73 financial year -

Red Hill	67
Cavendish	2
Hillary	1
West Street	16
Kenilworth	1
Mayville	5
Stellawood	300
Sydenham	1
Total	393

PRIVATE CEMETERIES

Returns are submitted monthly to this department giving details of the interments undertaken.

CREMATORIA

Details of cremations are as follows -

Stellawood	(White)	1 951
Clare Estate	(Indian)	469
Cato Manor		335
Total		2 755

PAUPER BURIALS

Details of pauper burials are as follows -

White	15
Indian	10
Bantu	3 875
Total	3 900

XIII. GENERALCONFERENCES

During the current year the Department was represented at a number of general meetings of various organisations, symposia arranged by technical authorities and inspections, mention being made of those away from Durban and a few of the local events of importance.

The City Medical Officer of Health was a delegate at the 49th South African Medical Congress in Cape Town as the City Council's representative. He attended the symposium "Health Education in South Africa" held in Johannesburg on 13th April when he was elected to the Executive Committee of the South African Council for Health Education.

He was also present at a Housing Management Conference held during three days in October in Johannesburg when 150 delegates representing municipalities, the State department and some private organisations attended.

As a nominee of the City Council to the Natal Regional Research Liaison Committee, by resolution dated 13th December, 1963, the City Medical Officer of Health attended the annual meeting of this committee, which was established under the aegis of the Council for Scientific and Industrial Research, on 27th April 1973. In attendance were representatives of the Natal Provincial Administration, the Natal universities, the two major local authorities, Natal Chamber of Industries, the Council for Scientific and Industrial Research itself and various of its Research Institutes. As is customary at these meetings, a number of subjects of a scientific nature received top-level consideration.

The City Medical Officer of Health viewed the methods employed in Johannesburg by an industrial waste disposal company to confirm that the manner in which toxic materials were disposed of was efficient in rendering them non-injurious to health, and on the subject of Noise Pollution he accompanied the delegation to the Municipal Noise Abatement Bureau in that city.

The City Medical Officer of Health opened a symposium in Durban on Community Health Care held under the auspices of the Public Health Nurses' Discussion Group. Papers were presented by highly qualified lecturers and most of the Department's health visitors attended.

The City Medical Officer of Health and the Chief Health Inspector attended the Annual General Meeting of the Institute of Public Health held in Germiston and during the morning attended an interesting seminar on "park homes".

Medical Officers and nursing personnel attended a three-day conference on Mental Health held in Pietermaritzburg in June. The subject "Psychiatry as an Integral part of Public Health" was organised jointly with the State Health Department. This course was repeated in Durban for non-White personnel from the local authorities and State Health Services and was considered highly successful and of great benefit to the participants.

The Veterinary Medical Officer attended a short course in public health bacteriology held at the Witwatersrand College for Advanced Technical Education from 12th to 23rd November. He also attended the South African Veterinary Association's Congress held at Botha's Hill, Natal, on 8th June.

The Senior Dairies Inspector spent five days visiting the Johannesburg City Health Department for the purpose of studying milk control techniques and standards applicable there.

Health Visitors attended various lectures at the Durban Child Welfare seminar on "Communication in Child Welfare" during three days in November. The Deputy City Medical Officer of Health (Dr. N. L. Becker) delivered a paper illustrated by slides on the "Changing Face of Child Welfare."

The Department's Health Education Auditorium was put to good use during the year, many lectures, short symposia, meetings and the like on a variety of subjects of public health or allied importance being held. To quote two examples - on 20th June a symposium "Drug Control and Drug Abuse" was held which featured a display of drug exhibits by the courtesy of the Drug Squad of the South African Police, and talks on drug experiences in the harbour area by an officer of the Railway Police, and those in the field of drug abuse and control by the officer in charge of the Drug Squad. A panel discussion was held under the chairmanship of the City Medical Officer of Health, and a member of the panel was Professor H. Grant-Whyte, National Chairman of the State Committee on the adverse reactions of modern drugs. This was followed by an address to headmasters of schools by the Deputy Director of Education, Natal.

On the 4th July, Dr. Richard Philipson, Assistant Director of the National Institute of Mental Health, Washington, who had retired as a Brigadier General (Psychiatrist) from the British Army, gave a talk on various aspects of the drug problem to professional and other interested persons.

During the year the City Council adopted a recommendation authorising the City Medical Officer of Health or his deputy or assistant to attend meetings of the Executive Committee of the Preventive and Community Medicine Group of the Medical Association of South Africa and to pay visits to the South African Institute for Medical Research, the Medical School and Council for Scientific and Industrial Research in Johannesburg or Pretoria, subject to a maximum four visits per calendar year.

MEDICAL PUBLICATION

This year marked the publication of "Clinical Medicine in Africans in Southern Africa", an essentially 'Durban' work co-edited by Drs. G.D. Campbell, Y.K. Seedat and G. Daynes. Dr. C.R. Mackenzie and Dr. N.L. Becker of this Department each contributed a chapter to this pioneer venture.

TRAINING FACILITIES

The Institute of Public Health (Natal Branch) conducted a course on "Industrial Hygiene" at the University of Natal in Durban from 16th to 20th July in which members of the staff of this Department played a prominent part.

Whilst holidaying in England the Senior Health Visitor, Sister P.M. Tyzack attended the Upper Middle Management Course at Huddersfield from 22nd October to 16th November when she found the lectures most interesting and informative and of benefit to the departmental community health activities.

The Department, as in previous years, placed its services, facilities and expertise at the disposal of many individuals and groups, for varying periods, the most important of whom comprised the following -

(a) Nursing

Public health nursing students (White, Coloured, African and Indian) pupil and student nurses from King Edward VIII, R.K. Khan, McCords and Addington general hospitals; pupil midwives from Mother's Hospital;

Diploma of Nursing and B.Sc. Nursing students (White and African); students in Hospital Administration from the University of Natal; and Bantu family planning students;

(b) Veterinary

Several final year B. V.Sc. students spent three weeks vacation practice seeing relevant aspects first hand within this Department and at the Abattoir;

(c) Health Inspection

National Diploma for Health Inspectors;

(d) Administration

Appropriate information on public health administrative routines, legislation extracts, codes of practice, records and statistics were made available to many students and interested parties by the responsible senior administrative officers.

EXAMINATION SUCCESSES

The following members of the staff were successful in the 1973 National Diploma examinations -

Health Inspectors

Messrs. M.A.C. Hayter
T.A. Kenton
C.E. Teidt
G.A. Walker

Public Health Nursing

Mrs. P.V. Govinder

At the annual prizegiving ceremony of the Natal College for Advanced Technical Education two Learner Health Inspectors on the staff received awards -

(a) Alex Smith Memorial Award for 1972 (most promise and application to his work) - H. Gaze;

(b) Certificate for Highest Examination Mark in the Republic (Physics and Chemistry) - N.V. Palethorpe.

The City Council's Addington Centenary Bursary for 1972/1973 was awarded to Mrs. M.E. Nicholson to enable her to obtain the Mothercraft Certificate.

NURSING AWARDS

Changes have been effected in nurses' training and with the introduction of the position of the registered enrolled nurse, the City Council recognised this class of student and resolved in June 1972 to present additional awards in the form of a travelling clock and a suitably inscribed certificate as well as the customary gold and silver medals and gold and stainless steel fob watches to selected diploma nursing students and runners-up.

Awards in 1973 were as follows -

Addington Hospital (Provincial)

Diploma	: Gold Medal	: Miss M.K. Callender
	: Silver Medal	: Miss S.J. Vincent
Enrolled	: Travelling Clock:	Miss D.V. Warren
	and Certificate	: Miss L.A. Theunissen

King Edward VIII Hospital (Provincial)

Diploma	: Rolled gold fob watch	: Miss D. Sibeya
	: Stainless steel fob watch:	Miss N.V. Ngqobe
Enrolled	: Travelling clock	: Miss N.N. Zuma
	: Certificate	: Miss S.V. Mkize

Entabeni Hospital (Private)

Diploma	: Rolled gold fob watch	: Miss M.M. Absolom
	: Stainless steel fob watch:	Miss C.M. Barwise
Enrolled	: Travelling Clock	: Miss S.L. Rouillard
	Certificate	

R.K. Khan Hospital (Indian) (Provincial)

Diploma	: Rolled gold fob watch	: Miss S. Behari
	: Stainless steel fob watch:	Miss P. Jagananen
Enrolled	: Travel clock and	
	certificate	: Miss R. Moothiram

St. Aidan's Hospital (Indian) (Private)

Diploma	: Rolled gold fob watch	: Miss N.C. Saib
	: Travel clock and	
	certificate	: Miss G.N. Mathe

St. Augustine's Hospital (Private)

Diploma	: Rolled gold fob watch	: Miss C.M. Powell
	: Stainless steel fob watch:	Miss S.A. Vail

FOODSTUFFS, COSMETICS AND DISINFECTANTS ACT

Arising from the above legislation, Act No.54 of 1972 which replaced the Food, Drugs and Disinfectants Act of 1929, the Minister agreed to authorise the City Council to enforce the full terms thereof within its area of jurisdiction and limited the number of free analyses to 700 per annum. Government Notice No. 3956 of 29th June 1973 refers.

MEDICAL BUREAU

The activities of this section of the Department remain substantially unaltered, comprising -

- (i) pre-employment examination of White, Coloured, and Indian entrants to the Municipal Service;
- (ii) convening of Medical Boards and medical examinations;
- (iii) provision of consultation;
- (iv) relief duties at departmental clinics;
- (v) Vi-testing of food handlers;
- (vi) clinical investigations where called for;
- (vii) public health supervision of particular infectious disease cases at fever hospitals in Durban;
- (viii) the surveillance of Injury on Duty reports.

Service	White		Non-White	Total
	Males	Females		
Pre-employment examinations	1 181 (1 299)	382 (362)	539 (794)	2 102 (2 455)
Consultations	597 (618)			597
Medical Boards	14 (10)	1 (3)	19 (16)	34 (29)

Pre-employment examinations have been centralised to expedite their completion. Chest X-Ray of applicants has revealed several cases of disease which would otherwise have been undetected.

XIV. STAFF AND FINANCIAL SUMMARYAMENDMENTS TO STAFF ESTABLISHMENTADDITIONS

Section	Group	Designation of Post	No. of Posts	Remarks	Council Authority
Health Inspection	White	Health Assistant	11	Re-organisation - See Footnote +	5.2.1973
Administration	White	Senior Typist	1	Conversion of Typists' Post	5.2.1973
Family Health	White	Clinical Medical Officer	1	Full-time medical cover for Family Planning	25.6.1973
Administration	White	Community Liaison Officer	1	Community Health and Welfare	25.6.1973
Administration(D.C.C.)	White	Senior Woman Assistant and	1	Regrading of Woman Assistant	20.8.1973
Executive	White	Deputy City Medical Officer of Health	1	Additional relief for City Medical Officer of Health	24.9.1973

+ The designation of seven General Assistant posts was changed to Health Assistant and four additional positions of Health Assistant were approved simultaneously, the existing positions of Health Assistant were converted in designation to Learner Health Inspector as this category caters for employees who study for the National Diploma for Health Inspectors. The Health Assistants perform minor inspectoral duties and act as general factota for the Health Inspectors of the various divisions.

Health Inspection	Col.	Health Assistant	1	Re-organisation	5.2.1973
	Ind.	"	4	"	"
	Ind.	Assistant	1	"	"
	Bantu	Health Assistant	3	"	"
	Bantu	Assistant	1	"	"
<u>DELETIONS</u>					
Health Inspection	White	General Assistant	7	Re-organisation	5.2.1973
Administration	White	Typist	1	Conversion to Senior Typist	"
"	White	Woman Assistant	1	Regrade to Senior Woman Assistant	20.8.1973

ANCILLARY STAFF MATTERS(i) Improvement in Monetary Remuneration

The Council's White Schedule of Grades was enhanced twice during the year, the first being introduced from 1st April and the second on 1st November. In the latter instance the rates for part-time medical personnel were substantially increased. However, little improvement occurred in the recruitment of such personnel.

The Non-White employees salaries and wages were enhanced by 15% from 1st February, and another improvement on 1st August. Non-White nursing employees in respect of whom the State pay a refund of salaries enjoyed a further increase from 1st November.

(ii) Uniform Allowances for Nursing Staff

These allowances for Health Visitors only were increased for Whites and Non-Whites from R50 to R60 per annum and R40 to R50 per annum respectively.

(iii) Locomotion Allowances : Rates

Improved rates became effective during the year for persons in receipt of fixed and variable car allowances due to the increase in the price of petrol.

(iv) Locomotion Allowances: Additional Allocations

Consequent upon a re-organisation of the Health Inspectors' districts nine additional locomotion allowances were granted by the City Council on 6th March to enable the staff to cover areas ranging from the Central City to the outer districts. This has made for greater efficiency as less time is wasted on travelling and Health Inspectors are given the opportunity, in the main, of working in both business and industrial areas as well as the more humdrum work that falls to their lot in the suburbs.

POST SUMMARY AS AT 31st DECEMBER 1973

<u>White</u>	<u>No.</u>	<u>Non-White</u>	<u>No.</u>
Medical Officer	19	Health Inspector	10
Veterinary Medical Officer	1	Lecturer	16
Clerical	50	Community Health Nurse (formerly Health Visitor)	41
Technician	1	Overseer	7
X-Ray Technician	2	Health Assistant	67
Radiographer	2	Nurse	20
Operator X-Ray	1	Spotter	13
Health Inspector	56	Nurse Aide	60
Community Liaison Officer	1	Operator	1
Community Health Nurse (formerly Health Visitor)	31	Clerical	2
Clinic Sister	9	General Assistant	1
Clinic Assistant	12	Interpreter/Cleaner	24
Supervisor	1	Assistant	17
General Assistant	11	Watchman	2
Laboratory Assistant	3	Labourer	124
Health Assistant (formerly General Assistant, Rodent Control)	11		
Learner Health Inspector	28		
General Assistant - Clerical (Unestablished)	1		
	<u>240</u>		<u>405</u>

+ Medical Personnel (Part-time)(a) Tuberculosis Clinic:

Consultant Radiologist

1 Dr. E.H. Fine, M.B.;
B.Ch.; D.M.R.D.; R.C.P.(b) Family Health and
Immunization:Consultant Obstetrician
and Gynaecologist1 Dr. S.T. Trezise, M.B.;
Ch.B.; M.R.C.O.G.

Consultant Paediatrician

1 Dr. J.H. Clyde, M.B.;
B.Ch.; F.C.P.; D.C.H.

Clinical Medical Officer

- Numbers unlimited but
restricted to a maxi-
mum of 220 hours per
week.

+ Not reflected in Staff Establishment Table.

STAFF ESTABLISHMENT

The authorised establishment as at 31st December 1973 was 240 White and 405 Non-White staff members, subdivided as follows -

ADMINISTRATIVE SECTION

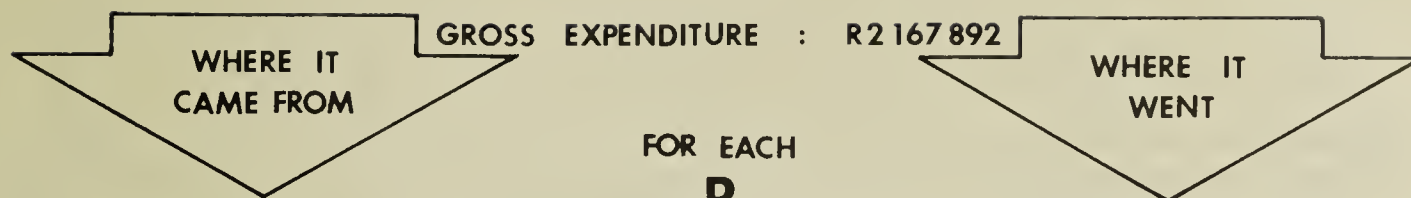
ADMINISTRATIVE SECTION	No.	EPIDEMIOLOGY (embracing tuberculosis, infectious diseases and venereal diseases control)	No.
City Medical Officer of Health, Dr. C.R. Mackenzie, M.B.; B.Ch.; D.P.H.; D.T.M. & H. (Rand); F.R.S.H.; F.I.P.H.	1	(a) <u>Tuberculosis</u> <u>White:</u> Senior Clinical Medical Officer,	3
Deputy City Medical Officer of Health, Dr. G.L. Hilton-Barber, M.B.; Ch.B.; D.P.H. (retired 9.4.1973)	2	Dr. E.A. MacIldowie, L.M.S.; Dr. P.R. Henson, M.R.C.S.; L.R.C.P.; D.P.H.; Dr. R.H. Brown, M.B.; Ch.B.; D.P.H.; D.I.H.	4
Dr. N.L. Becker, M.B.; Ch.B.; D.P.H.; B.Com. (with effect from 6.8.1973)		Clinical Medical Officer,	
Vacant		Dr. R.W.W. Bowes, M.R.C.S.; L.R.C.P.; M.A. (Cantab.); Dr. A.D. Nisbet, M.B.; B.Ch. (resigned 31.12.1973)	
Assistant Medical Officer of Health, Dr. N.L. Becker, M.B.; Ch.B.; D.P.H.; B.Com. (to 5.8.1973)	2	Dr. E.M. Fisher, M.B.; B.Ch.; Dr. J.C. Stuart, M.B.; Ch.B. (w.e.f. 26.2.1973)	
Vacant		Senior Assistant (Administration), Aitkenhead, V.J. Cert. R.S.H.	1
Personal Assistant, Poplett, D.J., M.R.S.H.	1	Health Inspector	1
Principal Assistant, Kibble, G.A. Cert. R.S.H.	1	Chief Clerk (Grade II)	1
Senior Assistant (Technical), Behn, A.L. Cert. R.S.H.	1	X-Ray Technician	2
Senior Assistant (Financial) Dyer, R.B. Cert. R.S.H.	1	Radiographer	2
Chief Clerk (Grade I, 2) (Grade II, 2)	4	Operator X-Ray	1
Senior Clerk (Grade I, 1) (Grade II, 4) (Grade III, 1)	6	Health Visitor	5
Records Clerk (Woman)	1	Clinic Sister	4
Woman Clerk	3	Woman Clerk	1
Clerk	8	Senior Woman Assistant	1
Principal Woman Assistant	2	Clinic Assistant	3
Senior Woman Assistant	4	Typist	1
Woman Assistant	7	<u>Non-Whites:</u>	
Chief Typist	1	Nurse (Indian 1; Bantu 1)	2
Senior Typist	2	Health Assistant (Indian 12; Bantu 21)	33
Typist	3	Nurse Aide (Indian 4, Coloured 1, Bantu 7)	12
General Assistant (Unestablished)	1	Interpreter/Cleaner (Indian 1; Bantu 4)	5
<u>Non-White:</u>		Labourer (Bantu)	6
Health Assistant (Bantu)	1		
Operator (Indian)	1		
Clerk (Grade I) (Indian)	1		
Clerk (Grade III) (Indian)	1		
Assistant (Indian)	7		
Watchman (Bantu)	2		
Labourer (Indian) (previous Bantu incumbent promoted and replaced by an Indian)	1		
Total	65	Total	88
<u>Staff Summary</u>		<u>Staff Summary</u>	
White	51+	White	30
Indian	11	Coloured	1
Bantu	3	Indian	18
(+includes unestablished position)	65	Bantu	39
			88
<u>COMMUNITY LIAISON OFFICER</u>	1		
Vacant			

(b) <u>Infectious Diseases</u>		No.	<u>VETERINARY HYGIENE</u>	No.
<u>White:</u>			<u>White:</u>	
Senior Health Inspector,		1	Veterinary Medical Officer,	1
McIver, E.I. Certs. R.S.H.; Meat and other Foods			Dr. W.B. Hobbs, B.V.Sc.	
Health Visitor		1	Laboratory Assistant	2
General Assistant		1	<u>Non-White:</u>	
<u>Non-White:</u>			Assistant (Laboratory)(Indian)	
Overseer (Bantu)		1	<u>Staff Summary</u>	Total 14
Labourer (Indian)		1	White 3	
<u>Staff Summary:</u>	Total 5	5	Indian 1	
White 3			<u>FAMILY HEALTH AND IMMUNIZATION</u>	
Indian 1			<u>White:</u>	
Bantu 1			Senior Clinical Medical Officer,	1
			Dr. H.A.B. Pletts, M.B.; B.Ch.	
(c) <u>Venereal Diseases Clinic</u>			Clinical Medical Officer,	2
<u>White:</u>			Dr. H.E. Rose, M.B.; Ch.B.	
Senior Clinical Medical Officer,		1	Dr. J.L.B. Hicks, M.B.; B.S. (w.e.f. 24.9.1973)	
Dr. S. Ward, M.R.C.S.; L.R.C.P.			Chief Health Visitor, Rankin, M.H.E. xx	1
Clinical Medical Officer,		2	Deputy Chief Health Visitor, Stead, R.J. xx	1
Dr. H.B. Savage, M.R.C.S.; L.R.C.P.			Senior Health Visitor, Tyzack, P.M. x	1
Dr. J.D. Prestwich, M.B.; B.Ch.(w.e.f. 17.9.1973)			Health Visitor	21
<u>Non-White:</u>			Clinic Sister	5
Nurse (Bantu)	4	4	Clinic Assistant	9
Health Assistant (Bantu)	9	9	<u>Non-White:</u>	
Interpreter/Cleaner (Bantu)	1	1	Senior Health Visitor (Indian 2, Bantu 2)	4
<u>Staff Summary:</u>	Total 17	17	Health Visitor (Coloured 4, Indian 15, Bantu 18)	37
White 3			Nurse (Indian 10, Bantu 4)	14
Bantu 14			Overseer (Indian)	1
<u>HEALTH INSPECTION</u>			Health Assistant (Indian 5, Bantu 4)	9
<u>White:</u>			Nurse Aide (Coloured 5, Indian 27, Bantu 16)	48
Chief Health Inspector, Ashdown, N.D.+	1	1	General Assistant (Indian)	1
Deputy Chief Health Inspector, Crickmore, C.R.A.	1	1	Interpreter/Cleaner (Indian 10, Bantu 8)	18
Senior Health Inspector	12	12	<u>Staff Summary</u>	Total 173
Clark, A.G.			White 41	
Green, C.E.O.+			Coloured 9	
Pearman, E.F.J.+			Indian 71	
Hogan, J.P.+			Bantu 52	
Griffin, R.E.+			x General Nursing, Midwifery, Health Visitors	
Knowles, D.H.+			and School Nurses Certificates.	
Phillips, L.G.F.+			xx Mothercraft Certificate in addition to above.	
Marsh, H.N.+			<u>HEALTH EDUCATION</u>	
Roberts, K.W.C.++			<u>White:</u>	
Schou, M.S.++			Senior Health Inspector, Hazle A.D.. Certs.	1
Spencer, D.W.++			R.S.H.; Meat & Other Foods; Tropical Hygiene	
Sutherland, F.T.+			Technician	1
Health Inspector	39	39	Health Visitor	1
Laboratory Assistant (Entomology)	1	1	General Assistant	2
Health Assistant (Re-designation of General Assistant)	11	11	<u>Non-White:</u>	
(Rodent Control)			Lecturer (Coloured 1, Indian 1, Bantu 2)	4
Learner Health Inspector (previously designated Health	28	28	Assistant Lecturer (Bantu)	1
Assistant)			Junior Lecturer (Indian 6, Bantu 5)	11
Pest Control:			<u>Staff Summary</u>	Total 21
Supervisor	1	1	White 5	
Senior General Assistant	1	1	Coloured 1	
General Assistant	7	7	Indian 7	
<u>Non-White:</u>			Bantu 8	
Health Inspector (Indian 8, Bantu 2)	10	10	<u>MEDICAL BUREAU</u>	
Overseer (Indian 1, Bantu 4)	5	5	Senior Clinical Medical Officer.	1
Health Assistant (Indian 8, Bantu 6, Coloured 1)	15	15	Dr. T.F. Kethro, M.B.; Ch.B.; D.P.H.; D.I.H.	
Assistant (Indian 8, Bantu 1)	9	9		
Spotter (Indian 3, Bantu 10)	13	13		
Labourer (Indian 12, Bantu 104)	116	116		
<u>Note:</u> All Health Inspectors hold a certificate	Total 270	270		
recognised in terms of the Public Health Act and			<u>TOTAL COMMUNITY GROUP SUMMARY</u>	
such additional qualifications as indicated:			White 240=	
+ Meat and Other Foods Certificate			Coloured 12	
++ Tropical Hygiene Certificate			Indian 149=	
<u>Staff Summary</u>			Bantu 244	
White 102			TOTAL 645	
Coloured 1				
Indian 40			(= Part-time Medical Officers	
Bantu 127			not included)	

FINANCIAL SUMMARY

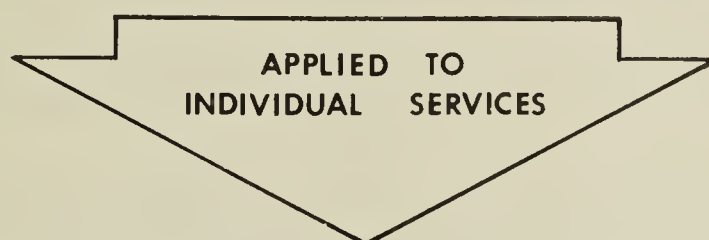
An abbreviated statement of the cost, excluding capital expenditure, of the services undertaken by the City Health Department for the financial year ended 31st July, 1973, with comparative figures for the preceding year, is set out below -

	<u>1972/73</u>	<u>1971/72</u>
	R	R
<u>Expenditure</u>		
Salaries, wages and allowances	1 503 275	1 414 601
Medical requisites	73 892	54 464
Tuberculosis hospitalisation -		
Government hospitals: net cost	-	-
Other hospitals: gross cost	89 101	136 443
Hospitalisation of Infectious Diseases including venereal diseases	22 910	42 193
Transport and subsidised locomotion	95 737	88 309
Miscellaneous, including electricity, insurance, rents, rates, telephones, stationery, maintenance and loan charges	382 977	383 015
	<u>2 167 892</u>	<u>2 119 525</u>
<u>Income</u>	<u>1972/73</u>	<u>1971/72</u>
	R	R
General, including hospital fees recovered	69 089	71 526
Government part-refunds: Public Health Act	791 400	844 804
Health Services debited to Bantu hostels and locations	121 132	121 692
	<u>981 621</u>	<u>1 038 022</u>
Net Cost	<u>1 186 271</u>	<u>1 081 503</u>



BOROUGH FUND REVENUE ACCOUNT	55c
GOVERNMENT PART REFUND ON SALARIES, HOSPITAL FEES, CLINICS AND HOSPITAL FEES RECOVERED	36c
BANTU REVENUE CONTRIBUTION	6c
FEES AND GENERAL INCOME	3c

SALARIES, WAGES, ALLOWANCES AND ALLIED STAFF EXPENDITURE	71c
HOSPITAL AND AMBULANCE FEES, MEDICINES AND LABORATORY SERVICES	11c
MISCELLANEOUS, INCLUDING ELECTRICITY, WATER, TELEPHONE, RENTS, RATES, INSURANCE, ETC.	13c
LOAN CHARGES ON CAPITAL	4c
REPAIRS, MAINTENANCE AND RENEWALS	1c



TUBERCULOSIS CONTROL AND CLINICS	25c
HEALTH INSPECTION INCLUDING FIELD HYGIENE	26c
FAMILY HEALTH	24c
ADMINISTRATION	14c
RENT, RATES, ELECTRICITY, TELEPHONES AND CLEANING	6c
VENEREAL DISEASES	3c
HEALTH EDUCATION	2c

NET COST PER CAPITA : R1,50 PER ANNUM
POPULATION : 790 276

1973

(Classified according to International Intermediate List of 150 Causes from Eighth Revision, World Health Organization, 1965)

Cause Group	Cause of Death	WHITE			COLOURED			BANTU			INDIAN			TOTAL		
		M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.
A 2	Typhoid fever	-	-	-	-	-	-	2	4	-	-	-	-	-	2	4
A 3	Paratyphoid fever and other salmonella infections	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
A 4	Bacillary dysentery and amoebiasis	1	-	-	-	-	-	3	4	-	-	-	2	2	3	5
A 5	Enteritis and other diarrhoeal diseases	4	-	4	5	18	10	28	12	50	41	91	89	116	84	200
A 6	Tuberculosis of respiratory system	3	-	3	8	2	2	4	1	25	17	42	48	39	25	64
A 7	Tuberculosis of meninges and central nervous system	-	-	-	1	-	-	-	-	3	3	6	8	6	3	9
A 8	Tuberculosis of intestines, peritoneum and mesenteric glands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 10	Other tuberculosis, including late effects	-	-	-	-	-	-	-	-	-	3	3	3	1	3	4
A 15	Diphtheria	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1
A 19	Meningococcal infection	-	-	-	-	-	-	-	-	1	1	1	1	2	1	3
A 20	Tetanus	-	-	-	-	-	-	-	1	1	-	1	6	1	1	2
A 21	Other bacterial diseases	4	4	8	14	1	2	3	5	3	3	6	17	10	10	20
A 25	Measles	-	1	1	-	2	-	2	-	9	12	21	24	14	17	31
A 27	Viral encephalitis	1	-	1	-	-	-	-	-	1	1	2	2	3	1	4
A 28	Infectious hepatitis	-	-	-	1	2	-	2	1	-	1	1	-	3	1	4
A 29	Other viral diseases	-	1	1	-	-	-	-	-	-	-	-	1	-	1	1
A 34	Congenital syphilis	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
A 44	All other infective and parasitic diseases	3	-	3	1	-	-	-	1	28	4	32	-	31	4	35
A 45	Malignant neoplasm of buccal cavity and pharynx	6	3	9	11	1	-	-	1	-	-	-	2	9	5	14
A 46	Malignant neoplasm of oesophagus	4	1	5	2	2	-	2	2	-	-	-	35	11	2	13
A 47	Malignant neoplasm of stomach	18	7	25	17	1	-	1	2	2	1	3	4	27	12	39
A 48	Malignant neoplasm of intestine, except rectum	12	19	31	25	2	1	3	1	-	-	-	4	16	21	37
A 49	Malignant neoplasm of rectum and rectosigmoid junction	3	5	8	12	-	1	1	-	-	-	-	3	6	8	14

Cause Group	Cause of Death	WHITE				COLOURED				BANTU				INDIAN				TOTAL				
				Tot.	1972			Tot.	1972			Tot.	1972			Tot.	1972			F.	Tot.	1972
		M	F			M	F			M	F			M	F			M	F			
A 50	Malignant neoplasm of larynx	2	3	5	3	-	3	1	1	1	-	1	-	1	-	7	2	3	10	3	10	6
A 51	Malignant neoplasm of trachea, bronchus and lung	56	20	76	71	6	3	9	9	20	5	25	24	11	3	93	14	31	124	31	124	118
A 52	Malignant neoplasm of bone	2	-	2	1	1	-	1	-	1	-	1	-	-	3	4	-	3	7	3	7	1
A 53	Malignant neoplasm of skin	8	6	14	7	-	-	-	-	-	-	-	1	-	-	8	-	6	14	6	14	8
A 54	Malignant neoplasm of breast	-	34	34	20	-	-	-	1	-	2	2	7	-	2	-	1	38	38	23	38	29
A 55	Malignant neoplasm of cervix uteri	-	9	9	9	-	3	3	-	-	4	4	12	-	7	-	3	23	23	7	24	
A 56	Other malignant neoplasm of uterus	-	3	3	2	-	-	-	-	-	1	1	-	-	3	-	1	7	7	7	3	
A 57	Malignant neoplasm of prostate	13	-	13	16	2	-	2	1	1	-	1	2	1	-	17	-	-	17	-	17	19
A 58	Malignant neoplasm of other and un-specified sites	48	51	99	88	5	5	10	7	16	1	17	25	18	10	87	20	67	154	67	154	140
A 59	Leukaemia	5	4	9	7	-	1	1	1	1	1	2	3	3	3	9	4	9	18	9	18	15
A 60	Other neoplasms of lymphatic and haematopoietic tissue	6	2	8	21	2	-	2	1	2	1	3	3	4	3	14	4	6	20	6	20	29
A 61	Benign neoplasms and neoplasms of un-specified nature	-	1	1	1	-	-	-	-	1	1	2	1	-	-	1	1	2	3	2	3	3
A 64	Diabetes mellitis	6	5	11	5	1	1	2	3	5	3	8	11	7	8	19	22	17	36	17	36	41
A 65	Avitaminoses and other nutritional deficiency	1	1	2	-	1	-	1	3	6	5	11	29	1	1	9	4	7	16	7	16	36
A 66	Other endocrine and metabolic diseases	-	2	2	-	-	-	-	-	1	1	2	3	2	-	3	5	3	6	3	6	8
A 67	Anaemias	3	-	3	7	-	-	-	-	1	-	1	2	2	2	6	7	2	8	2	8	16
A 68	Other diseases of blood and blood forming organs	-	1	1	-	-	-	-	-	-	-	-	-	1	-	1	-	1	2	1	2	-
A 69	Psychoses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
A 70	Neuroses, personality disorders and other non-psychotic mental disorders	-	-	-	1	1	-	1	-	4	-	4	-	1	-	6	-	-	6	-	6	1
A 72	Meningitis	-	1	1	5	-	-	-	3	8	7	15	17	2	-	10	6	8	18	8	18	31
A 74	Epilepsy	1	-	1	-	1	-	1	3	1	3	4	1	1	-	4	5	3	7	3	7	9
A 78	Otitis media and mastoiditis	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-
A 79	Other diseases of nervous system and sense organs	4	1	5	10	2	-	2	-	6	2	8	10	3	-	15	5	3	18	3	18	25

Cause Group	Cause of Death	WHITE				COLOURED				BANTU				INDIAN				TOTAL			
		M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.	1972
A 80	Active rheumatic fever	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2	-	1	1	2	1
A 81	Chronic rheumatic heart disease	3	3	6	3	2	-	2	-	2	-	2	2	2	2	5	9	9	5	14	14
A 82	Hypertensive disease	12	19	31	29	3	3	6	1	6	11	17	21	53	74	79	47	74	153	98	98
A 83	Ischaemic heart disease	249	168	417	424	11	10	21	13	3	3	6	10	209	102	283	234	472	755	681	681
A 84	Other forms of heart disease	74	93	167	172	6	9	15	22	34	11	45	63	63	63	176	122	177	353	379	379
A 85	Cerebrovascular disease	83	109	192	203	9	12	21	24	29	26	55	64	93	84	231	160	214	445	451	451
A 86	Diseases of arteries, arterioles and capillaries	28	19	47	30	2	-	2	3	1	2	3	4	6	1	22	5	37	59	42	42
A 87	Venous thrombosis and embolism	20	12	32	29	-	3	3	6	3	1	4	7	4	4	20	7	27	47	49	49
A 88	Other diseases of circulatory system	3	1	4	8	2	-	2	-	-	-	-	-	-	-	1	4	5	6	12	12
A 89	Acute respiratory infections	2	-	2	-	-	-	-	-	1	-	1	-	-	3	1	2	3	4	2	2
A 90	Influenza	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	2	1	-	1	2
A 91	Viral pneumonia	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
A 92	Other pneumonias	79	81	160	153	29	9	38	33	87	72	159	183	87	78	240	186	282	522	555	555
A 93	Bronchitis, emphysema and asthma	12	9	21	25	-	1	1	2	3	4	7	6	9	10	24	33	24	48	66	66
A 95	Empyema and abscess of lung	-	-	-	1	-	-	-	3	1	-	1	3	2	1	3	2	3	4	9	9
A 96	Other diseases of respiratory system	21	17	38	33	1	-	1	3	8	6	14	25	10	7	30	16	40	70	77	77
A 98	Peptic ulcer	5	-	5	6	-	-	-	-	1	2	3	-	6	4	6	1	12	18	7	7
A 99	Gastritis and duodenitis	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2	1	1	3	3
A 100	Appendicitis	-	1	1	-	-	-	-	-	1	-	1	-	-	-	2	-	1	3	-	-
A 101	Intestinal obstruction and hernia	-	-	-	8	1	-	1	1	2	-	2	4	1	-	4	1	4	-	4	14
A 102	Cirrhosis of liver	6	3	9	14	1	-	1	3	5	3	8	19	8	-	6	10	20	26	46	46
A 104	Other diseases of digestive system	24	24	48	38	3	1	4	8	25	15	40	63	21	12	52	23	73	125	132	132
A 105	Acute nephritis	2	3	5	3	-	-	-	-	-	1	1	-	-	2	6	4	2	8	7	7
A 106	Other nephritis and nephroses	5	5	10	12	1	-	1	-	6	3	9	7	2	5	13	11	14	27	30	30
A 107	Infections of kidney	3	3	6	4	-	-	-	1	1	1	2	-	-	3	7	1	4	11	6	6
A 109	Hyperplasia of prostate	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1
A 111	Other diseases of genito-urinary tract	9	3	12	19	3	2	5	-	1	1	2	5	1	8	14	7	14	28	31	31
A 113	Haemorrhage of pregnancy and childbirth	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	-	6	-	-
A 115	Other and unspecified abortion	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	3	3
A 116	Sepsis of childbirth and the puerperium	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-

Cause Group	Cause of Death	WHITE			COLOURED			BANTU			INDIAN			TOTAL		
		M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.	1972	M	F	Tot.
A 117	Other complaints of pregnancy, childbirth and the puerperium	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
A 119	Infections of skin and sub-cutaneous tissue	-	1	1	1	-	-	1	-	-	1	1	-	-	3	3
A 120	Other diseases of skin and sub-cutaneous tissue	-	-	-	2	-	2	1	-	2	-	2	-	4	1	5
A 121	Arthritis and spondylitis	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
A 125	Other diseases of musculo-skeletal system and connective tissue	-	1	1	4	-	-	-	-	-	1	1	2	-	2	2
A 126	Spina bifida	-	-	-	1	-	-	-	-	-	-	-	1	-	-	1
A 127	Congenital anomalies of heart	-	-	-	1	-	-	-	1	-	-	-	1	-	-	6
A 128	Other congenital anomalies of circulatory system	-	-	-	1	-	-	-	4	1	1	2	7	3	1	3
A 130	All other congenital anomalies	1	-	1	1	-	-	1	-	-	-	-	-	1	1	1
A 131	Birth injury and difficult labour	-	1	1	4	-	2	4	2	1	-	1	10	2	5	7
A 132	Conditions of placenta and cord	-	-	-	1	-	-	4	15	7	-	-	3	7	4	11
A 133	Haemolytic disease of newborn	-	-	-	1	-	-	-	-	-	-	-	1	-	-	2
A 134	Anoxic and hypoxic conditions not elsewhere classified	-	-	-	-	-	-	-	-	-	-	-	2	1	-	2
A 135	Other causes of perinatal morbidity and mortality	-	-	-	7	-	-	12	15	9	-	-	17	9	12	21
A 136	Senility without mention of psychosis	25	19	44	56	16	17	33	38	35	21	56	101	222	168	390
A 137	Symptoms and other ill-defined conditions	5	11	16	24	1	-	1	2	-	-	-	15	11	21	32
AE138	Motor vehicle accidents	81	86	167	160	28	20	48	40	517	428	945	881	865	745	1610
AE139	Other transport accidents	-	-	-	4	-	-	-	25	16	31	47	2	16	31	47
AE141	Accidental falls	-	-	-	-	-	-	-	13	-	-	-	-	-	-	13
AE142	Accidents caused by fires	-	-	-	-	-	-	-	4	-	1	2	2	1	1	2
AE143	Accidental drowning and submersion	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
AE145	Accidents mainly of industrial type	-	-	-	-	1	-	4	-	4	-	-	-	5	-	5
AE146	All other accidents	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
AE147	Suicide and self-inflicted injury	-	-	-	-	-	-	-	2	-	1	2	-	1	1	2
AE148	Homicide and injury purposely inflicted by other persons: legal intervention	-	-	-	1	-	-	-	2	-	-	-	-	-	-	3
AE149	Injury undetermined whether accidentally or purposely inflicted	-	-	-	-	-	-	-	43	2	-	-	-	2	-	43
TOTALS		60	22	82	86	27	13	40	31	57	3	60	41	104	76	324
TOTALS		1026	901	1927	1943	203	129	332	307	1075	796	1871	2050	1220	2743	6267
CRUDE DEATH RATES		9,66 (9,84)			7,07 (6,77)			8,47 (9,54)			6,64 (6,22)			7,91 (8,10)		

(Classified according to International Intermediate List of 150 Causes from Eighth Revision, World Health Organization, 1965)

Cause Group	Cause of Death	WHITE				COLOURED				BANTU				INDIAN				TOTAL			
		Tot.		1972	M	Tot.		1972	M	Tot.		1972	M	Tot.		1972	M	F	Tot.	1972	
		M	F			M	F			M	F			M	F						
A 2	Typhoid fever	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	88	-	-	1	
A 5	Enteritis and other diarrhoeal diseases	1	-	1	2	11	42	37	79	73	37	24	61	59	-	-	88	65	153	145	
A 6	Tuberculosis of respiratory system	-	-	-	-	-	-	2	2	2	-	1	1	-	-	-	-	3	3	2	
A 7	Tuberculosis of meninges and central nervous system	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	3	
A 19	Meningococcal infection	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	2	
A 20	Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
A 21	Other bacterial diseases	-	-	-	3	-	1	3	4	13	1	3	4	7	1	2	6	8	23		
A 25	Measles	-	-	-	-	-	7	9	16	10	3	2	5	5	11	11	22	15	15		
A 27	Viral encephalitis	-	-	-	-	-	1	-	1	1	-	-	-	-	-	1	-	1	1		
A 28	Infectious hepatitis	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	1	-		
A 34	Congenital syphilis	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1		
A 65	Avitaminoses and other nutritional deficiency	-	-	-	-	1	4	3	7	13	1	1	2	1	5	5	10	15	15		
A 66	Other endocrine and metabolic diseases	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	1	-	-		
A 67	Anaemias	-	-	-	-	-	1	1	2	2	-	-	-	-	1	1	2	2	2		
A 72	Meningitis	-	-	-	2	3	4	3	7	7	1	-	1	4	6	3	9	16	16		
A 79	Other diseases of nervous system and sense organs	-	-	-	1	-	1	1	2	1	2	-	2	-	3	1	4	2	2		
A 83	Ischaemic heart disease	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
A 84	Other forms of heart disease	-	-	-	3	-	3	1	4	2	1	1	2	1	4	2	6	6	6		
A 85	Cerebrovascular disease	1	-	1	-	1	-	-	-	3	1	-	1	6	2	1	3	10	10		
A 86	Diseases of arteries, arterioles and capillaries	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	2		
A 87	Venous thrombosis and embolism	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1		
A 89	Acute respiratory infections	-	-	-	-	-	-	-	-	-	2	-	2	-	2	-	2	-	-		
A 91	Viral pneumonia	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1		
A 92	Other pneumonias	1	3	4	4	10	36	52	88	92	28	15	43	69	69	70	139	175	175		
A 93	Bronchitis, emphysema and asthma	-	-	-	-	-	3	-	3	-	2	-	2	1	5	-	5	1	1		
A 96	Other diseases of respiratory system	-	-	-	2	-	3	4	7	10	2	1	3	2	5	5	10	14	14		
A 98	Peptic Ulcer	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
A 100	Appendicitis	1	2	3	-	-	-	-	-	-	-	-	-	-	1	2	3	-	-		

Cause Group	Cause of Death	WHITE				COLOURED				BANTU				INDIAN				TOTAL			
		M		F		Tot.		1972		M		F		Tot.		M		F		Tot.	
A 101	Intestinal obstruction and hernia	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
A 102	Cirrhosis of liver	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
A 104	Other diseases of digestive system	1	1	1	-	1	1	1	1	4	2	2	6	20	5	6	6	3	9	26	26
A 105	Acute nephritis	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	1	1	-	-
A 111	Other diseases of genito-urinary system	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	1	1
A 126	Spina bifida	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	1	3
A 127	Congenital anomalies of heart	1	-	-	-	1	1	1	1	1	-	-	1	4	7	5	5	1	6	13	13
A 128	Other congenital anomalies of circulatory system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
A 130	All other congenital anomalies	2	4	6	-	-	-	2	2	1	4	5	5	2	10	9	10	10	19	17	17
A 131	Birth injury and difficult labour	-	-	-	1	2	1	1	1	7	4	4	11	15	3	12	12	9	21	20	20
A 132	Conditions of placenta and cord	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	2
A 133	Haemolytic disease of newborn	-	-	-	-	-	-	-	-	1	-	-	1	-	2	1	1	-	1	2	2
A 134	Anoxic and hypoxic conditions not elsewhere classified	2	2	4	1	5	6	6	6	9	12	21	21	15	17	31	37	68	44	44	44
A 135	Other causes of perinatal morbidity and mortality	25	19	44	17	33	38	56	38	35	21	56	101	146	257	222	168	390	452	452	452
A 137	Symptoms and other ill-defined conditions	4	-	4	4	4	7	1	7	205	192	397	337	83	37	265	223	488	382	382	382
AE146	All other accidents	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-
AE149	Injury undetermined whether accidentally or purposely inflicted	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	3	3
TOTALS		39	31	70	31	69	84	93	84	371	353	724	732	528	501	759	632	1 391	1 410	1 410	1 410
INFANT MORTALITY RATES (DEATHS OF INFANTS UNDER ONE YEAR PER 1 000 LIVE BIRTHS)		12,80 (17,72)				31,55 (38,72)				48,86 (77,39)				41,16 (35,05)				39,50 (49,66)			

